

E1/209/17.

AN EASY
INTRODUCTION
TO THE
KNOWLEDGE OF NATURE.



1851

TO THE

KNOWLEDGE

A N E A S Y
I N T R O D U C T I O N
T O T H E
K N O W L E D G E O F N A T U R E,
A N D R E A D I N G T H E
H O L Y S C R I P T U R E S.
A D A P T E D T O T H E
C A P A C I T I E S O F C H I L D R E N.

By Mrs. TRIMMER. 

The THIRD EDITION,
WITH ADDITIONS AND IMPROVEMENTS.

L O N D O N,

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M.DCC.LXXXIII.

INTRODUCTION



KNOWLEDGE

AND RESEARCH

HOLY SCRIPTURES

ADAPTED FOR

CAPACITIES & CIRCUMSTANCES

BY

THE

BRITISH MUSEUM

LONDON

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1861

TO THE

RIGHT HONOURABLE

Lady Charlotte FINCH.

MADAM,

THE purpose for which
this little Treatise
was composed, can alone en-
title it to your Ladyship's
notice, for in its execution I
fear it is very imperfect; but
as it is intended to lead to
the most serious concerns of

A 3

Human

Human Life, *The Knowledge of the GREAT CREATOR and the Study of His Works*, I hope it will not be thought totally unimportant.

Permit me to say, MADAM, that before I ventured to produce it to the World, I had the happiness to obtain the sanction of your LADYSHIP's approbation, which encouraged me to hope for a favourable reception from the
Public ;

Public ; as the great success with which you have educated the ROYAL FAMILY, so evidently proves, that your LADYSHIP is perfectly acquainted with the most happy arts of winning the attention of Children, and the most proper method of conveying religious and moral Instruction to their tender minds.

With the most ardent wish
that your LADYSHIP may
A 4. long.

(viii)

long continue to enjoy every
comfort both of public and
domestic Life, I have the
Honour to be,

MADAM,

Your LADYSHIP'S

most obliged,

and devoted Servant,

SARAH TRIMMER.

BRENTFORD,
Dec. 12, 1780.

P R E F A C E.

AS it may seem unnecessary to add to the number of Books which have already been written expressly for the use of Children, I think it proper to mention, that the hint of the following little work was originally taken from Dr. Watts's Treatise on Education, Section the 2d, on the exercise and improvement of the natural powers of Children: his Words are these,

“ Almost every thing is new to
“ Children, and novelty will entice

A 5

“ them.

" them onwards to new acquirements :
 " Shew them the Birds, the Beasts,
 " the Fishes, the Insects, Trees, Fruit,
 " Herbs, and all the several parts and
 " properties of the vegetable and ani-
 " mal World. Teach them to observe
 " the various occurrences of Nature
 " and Providence, the Sun, Moon and
 " Stars, the Day and Night, Summer
 " and Winter, the Clouds and the
 " Sky, the Hail, Snow, and Ice,
 " Winds, Fire, Water, Earth, Air,
 " Fields, Woods, Mountains, Rivers,
 " &c. Teach them that the GREAT
 " God made all these, and that his
 " Providence governs them."

But delightful as these things are to
 Children, if communicated in a way
 that is accommodated to their capaci-
 ties, they can never be brought in their
 early

early years to attend to scientific accounts of causes and effects, or to enter far into each particular branch of knowledge.

I therefore thought, that a Book containing a kind of general survey of the Works of Providence, might be very useful; as a mean to open the mind by gradual steps to the knowledge of the SUPREME BEING. For as we need only read the *volume of nature*, in order to discover his *Wisdom* and *Goodness*, a desire of doing his *Will* might from thence be excited in their minds, before they were permitted to read the *Holy Scriptures*, which they should not begin till they had been previously taught, that they contain the revelation which he has vouchsafed.

to make of himself, his gracious dispensations towards mankind, and the duties we are required to perform in order to obtain his favour.

I have never yet met with any *one* Book sufficient to answer these purposes; for though there are numbers excellently calculated to improve those who have made some progress in knowledge, they are in general too difficult to begin with, and therefore require something preparatory; excepting those which contain exemplary histories suited to their age: which, though they have a very good tendency, are not alone sufficient to form the minds of Children.

Nor have I the vanity to suppose that this imperfect performance will
fully

fully answer that purpose; it is only meant as a Link in the Chain of Education, where there appeared to me to be a deficiency; and I flatter myself that it will prepare the minds of Children for higher degrees of knowledge, and so increase the value of some of those entertaining and instructive Books which have already been published for their use; for I am persuaded from experience, that those who can be induced to advance as far as I have here endeavoured to lead them, will naturally aspire to higher degrees of information.

I cannot pass over this opportunity of mentioning a very useful Publication, entitled *Lessons for Children from two to four Years old*, written by Mrs. Barbauld, (sold at No. 72, St. Paul's Church

Church Yard,) which I think are the best adapted for the purpose of teaching them to read, of any I ever met with. I have endeavoured to adopt a mode of expression similar to Mrs. Barbauld's Lessons, and to build upon the ground-work which that ingenious Lady has laid for the Instruction of Children, in a stile of familiar conversation.

Perhaps it will be thought that I have deviated from my plan of simplicity and ease in the latter part of this Work; but I have here taken for my guide the *Archbishop of Cambray's Instructions for the Education of a Daughter*, and indeed copied him in some places respecting the distinction between the Soul and the Body. To the authority of this great name I shall
only

only beg leave to add my own humble opinion, that Children may be taught these things at an earlier age than is usually practised; and surely in this case above all others, the experiment ought to be made; for if it be thought necessary to teach them sometimes the ornamental parts of Education, which can be of use only in this transitory life, how much more necessary is it to embrace the first opportunity of seasoning the Infant Mind with those spiritual graces which are calculated to prepare them for a happy Eternity?

Such instructions are of the highest importance, and most essential for all to be acquainted with; therefore arguing from the *Goodness* and *Condescension* of the ALMIGHTY, there is reason
to

to hope, that he will assist those with his especial blessing, who endeavour to impress the minds of Children with a devout sense of their CREATOR, and a *desire of immortal Happiness*, by calling their early attention to *the Works of His Providence, and the Truths of His Religion.*



AN

Easy Introduction, &c.

PART I.

I HAVE been thinking, my dear Charlotte, that you and I might take some very profitable walks together, and at the same time that we are benefiting our health, by air and exercise, might improve our minds; for every object in nature, when carefully examined, will fill us with admiration, and afford us both instruction and amusement; and I am persuaded we shall find, that nothing has been made in vain.

Though

Though Henry is so young, he is a sensible little Boy, and will be able, I dare say, to understand many things, which we shall have occasion to talk of; therefore I think to take him with us: I long to see him, as I suppose he is greatly pleased with his change of dress! Oh! here he comes. Your Servant, Sir; you are very smart, indeed; I could not imagine what little Beau it was, strutting along; I suppose, now you are dressed like a Man, you begin to fancy that you are one; but though you can read and spell, spin a Top, and catch a Ball, I do assure you, there are a great many things for you to learn yet, and I shall be happy to teach you what I know. Your sister and I are going to take a walk; we shall have many pretty things to look at, and talk about, therefore I dare say you will be happy to be of our party; will you not?



You

You know, my dears, in the walks we have already taken in the fields together, I shewed you a great variety of Plants and Flowers; you have seen the Cattle and Sheep grazing, the little Birds hopping and flying about; and though I told you the name of every thing you saw, which I hope you remember, you must learn to know a great deal more about them. Charlotte is going to get herself ready, so fetch your hat, Henry, and let us go into the Meadows, where I am sure we shall soon find something worth examining.

Well, Henry, what do you think; is not this a charming Place? You know that it is called a Meadow: See how green the Grass looks, and what a number of pretty Flowers! Run about, and try how many different sorts of Grass you can find, for it is
now

now in blossom. One, two, three: bless me, you have got eight sorts! Charlotte has gathered quite a nosegay; Daisies, Cowslips, Buttercups: As for the rest, I do not know their names, so we must search the Herbal, where we shall find them, and learn what they are called.

I need not tell you what is the use of Grass, because you have so frequently seen the Cows, Horses, and Sheep eating it; but they do not eat it all, no; a great quantity of the Grass that grows is cut down with a Scythe, like what our Gardener uses, which is called mowing; then come the haymakers, who turn it over and over again, spreading it upon the Ground, and when the Sun and Air have sufficiently dried it to keep it from becoming mouldy, it is carried home to the Farmer's yard, and put together in great heaps called Hay-ricks and Hay-stacks.

There

There are thousands and thousands of loads made every year, which serve to feed the Cattle in the winter; for there is but little green Grass for them then. All of it grows from little Seeds no bigger than pins heads; look at the Blossoms in your hand, Henry; they would soon have turned to seeds.

In a Meadow where there has been Hay made, a great many of the dry seeds drop and are scattered about, and Grass springs from them the next year; but if people want to make a new Meadow, they must keep some seeds and sow them.

The beautiful Flowers which you have in your hand, Charlotte, grew likewise from seeds which were mixed amongst the Hay-seeds; for the Plants which sprung from those seeds are good for the Cattle, and serve to give a pleasant taste to the grass. Besides, numbers of them are medicinal,

cinal, that is, good to make medicines for the cure of many disorders we are subject to.

Don't you think that Grass is a very useful thing? I am sure the poor Horses, Cows, and Sheep, would say so, could they speak; for they have no Cooks to dress victuals for them, nor Money to buy Bread, nor can they ask for any thing they want; so you see their food grows under their feet, and they have nothing to do but to eat it.

Now we will take leave of the Meadow, and go into the Corn Field. Look, Henry, pray take notice, Charlotte, this is Wheat. I hope we shall have a plentiful Harvest; but it will not be ripe till August, which is called the Harvest Month: However, I put this Ear in my pocket, which was plucked last year, on purpose to shew
you

you what all this which grows here would come to: rub it with your hands, Henry, blow the chaff from it, give me one of the seeds. This is called a Grain of Corn. You see there are a great many Grains in an Ear; and look, here are a great many Ears from one Root, and yet the whole Root grew from one single Grain, which was sowed last year.

The Earth was turned up with a Plough, then the grains of Corn were thinly sprinkled in the Furrows, and the Earth drawn over them with a Harrow; after they had swelled some time, and become soft, by the moisture of the Ground, little Roots struck downwards, and Stalks grew upwards, broke through the Ground, and branched out, in the manner you see here; and produced Ears, each of which perhaps, contains twenty Grains; and so, if you reckon all that are grown from the Seeds which came up, there may be twenty times

as many as were put into the Earth.

This which grows now will be ripened by the Sun, and look like that which you rubbed to pieces; then it will be cut down with a Sickle, and tied up in bundles called Sheaves, and carried to the Barn, where it will be threshed, cleaned from the Chaff, and sent to the Miller; he will grind it into Flour, which will be sold to the Bakers, who will make it into Bread; but they must leave some for Puddings and Pies.

Only think, Henry, what a deal of Corn must be sown every year, to furnish Bread for thousands and ten thousands of people! And what should we do without it? for Bread is the cheapest and wholesomest Food we have; many poor people can get but little else to eat.

But Corn will not grow without sowing, as the Hay seed does, because

cause the seed is larger, and must be buried deeper in the earth, therefore a deal of hard work must be done to prepare the ground for it. But my dear Charlotte, I think you have tired yourself; and Henry seems to have done so too; therefore let us sit down on this mossy Bank, and rest.

What a fine spreading Oak is this, which serves us for a canopy, and shades us so comfortably from the Sun! See what a number of Acorns hang upon it; they are excellent food for Hogs. But do not think that the stately Oak is good for nothing but to supply them with provision; it is of the greatest use to us. How large it is! it is bigger round than any Man ever was; it has hundreds of Branches, thousands of Acorns, and still more Leaves. It has great roots, which strike a long way into the
 B ground,

ground, and spread all round at the bottom ; they keep it from being blown down, by the violent gusts of wind, which it frequently has to encounter ; and through the Roots it is, that the moisture of the earth nourishes it, and keeps it alive.

Now, Henry, is it not a very surprising thing, that this great Tree grew at first from a little Acorn ? Look, here is a young one, called a Sapling ; it is so little, Charlotte, that you will be able to pull it up yourself. There you see is the Acorn still sticking upon the root. The Oak we sit under, probably is an hundred years old ; when it is cut down it will be called Timber ; the Sawyers will saw it in pieces proper to be used in building Ships, and Houses.

There are many sorts of Timber Trees besides, as Ash, Elm, Chesnut, Walnut, and others.

When

When there are a number of Trees growing near together, the place is called a Wood; you have each of you been in one, you recollect that, I suppose, and what kind of a place it was. I wish we were in one now, for it is hot walking.

But I was going to observe, that all sorts of Trees grew either from Seeds, or Kernels that are withinside their Fruit, or else from little Plants taken from the old roots, or slips taken off from their Branches. All timber Trees grow without any trouble, for the rain waters them; but I forgot to mention the Bark, Charlotte, which is this outside part. It is of great use to Tanners and Dyers; and the dry branches, which are good for nothing else, make chearful, comfortable fires; so that you see Trees are very valuable things; nay, poor Henry would miss them; for Traps, Tops, and Bats, are cut out of them.

See how the pretty birds sit singing on the branches; how glad they must be, when it rains, to shelter themselves amongst the Leaves: Besides, if a heavy shower was to come now, we should be happy to stand under a Tree ourselves, provided there was no appearance of a Thunder-storm; for in Thunder-storms Trees often attract the Lightning, which might make it very dangerous to be near them.

Don't you smell something very sweet? Look about in the Hedges, Henry, and see if you can discover what it is; bless me! Charlotte, what a fine parcel of Woodbines he has got; they are quite delightful: You see the Woodbine is very different from the Oak; it has long slender stalks, and would fall upon the ground, but that it borrows assistance of its neighbours. Observe how it twists about,

about, and lays hold, first of one thing, then of another. Last month there were Briar-Roses and Hawthorns, that were very beautiful, but now they are out of Blossom, and see the Fruit is growing. The Briars produce Hips; the Hawthorns, Haws; they are for the Birds to eat in the Winter. There are a great many pretty things that grow in the hedges, as you may see, and all are of some use. These are Brambles; they will soon produce Blackberries: Don't you love Blackberries? you shall come and gather some when they are ripe; but you must be sure never to eat any thing that grows wild in the Fields, without knowing what it is, because some berries that appear very beautiful to the eye, are poison, and would kill you.

There was a little Boy who gathered something that looked almost like Currants, and as soon as he had swallowed them, his throat and stomach

felt as if he had eaten fire ; and he swelled and swelled, till in a short time he died ; and yet those berries might be very good, and even valuable for some uses.

The Farmers plant Hedges to divide and secure their fields ; for if the Cattle should get amongst the Corn, they might do a great deal of mischief ; besides, people would not know exactly where their own ground ended, and their neighbours began ; and the Cattle would be very cold in the nights, but that the hedges shelter them.

Don't you think this has been a very pleasant Walk, Henry ? Shall I cut you a Stick ? Here, take this, it is a Hazle-twigg ; Nuts grow on Hazle Trees : Filberts are another kind of Nut, much more delicious : Walnuts you have seen growing in our orchard.

There

There are a variety of fruits which are contained in hard shells, in the same manner; as Almonds, Chesnuts, &c. The Cocoa-nut is the largest that I know of; you saw and tasted one the other day. I never saw a Cocoa-nut tree, so cannot give you a perfect description of it, but have read that it grows straight without any branches, and is generally very high: at the top it bears twelve exceeding large leaves, used by the Indians in covering houses, making mats and other things; between the leaves and the top arise several shoots, as thick as a man's arm, which being tapped, yield a very agreeable liquor, called in the East-Indies toddy, from which Arrack is made; but frequent tapping destroys the tree: these shoots or branches put forth a large cluster or bunch of Cocoa-nuts, to the number of ten or twelve.

Three times a year the Tree yields fruit, which is as big as a man's head ; but there is another sort no larger than your fist, which they make punch-ladles of in the West-Indies.

It is astonishing to think what a quantity of provision and useful materials these Trees supply ; they grow in the East and West-Indies, and in Africa.

There is another sort of nut called the Cacao ; this grows in the West-Indies, and South-America. The tree which produces it is something like our Cherry-tree, and the Nut about the size of an Almond : there are seeds withinside, which are made into Chocolate, with the addition of some other ingredients. The best sort of this nut is imported from Carraca.

I begin to fear you will be tired ; we must therefore think of returning home, but we will go through the Barley Field.

Observe ;

Observe; this is very different from Wheat; the ears have long, hairy spikes, which are called Beards. Do not put them in your mouth, for if you do, they will stick in your throat and choke you. Barley is sowed in the same manner as Wheat is, but does not make such good Bread; it is however very useful to us, for after it has been threshed, it is sold by the Farmers, in great quantities to the Malsters; who pour Water upon it, which makes it sprout; then they dry it with hot Cinders, and it becomes Malt; with the addition of a great deal of water, and some Hops, to give it a pleasant bitterish taste, and keep it from becoming sour, it is brewed into Beer, which is one of the comforts of life, and helps to give the poor Men who drink it, strength to do their laborious work. Barley is also good to feed Chickens, Turkeys, and other Poultry.

Hops, you know, grow in Gardens and Fields, which are from thence called Hop-Grounds; and run up long poles; when they are ripe they are gathered, dried, and sold mostly to Men called Hop-Merchants.

Now we are come to a Field of Oats, pray look at it that you may know it again from Wheat and Barley. The poor Horses make their Meal of Oats and Hay all the Winter, and when they are kept in Stables they eat them in Summer too; so that you find Oats are very useful.

We have in England another kind of Corn, called Rye, of which Bread is sometimes made; but this is inferior to Wheat.

Some Countries do not produce Corn like what grows here, but are in general supplied with something that partly answers the same purpose, though

though I believe all are glad to get Wheat, if they can purchase it; and great quantities are exported from England, France, &c. in plentiful years, which is sold to great advantage.

The Grain which is called Turkey Wheat is very different from ours. Its stalk is like a Reed with many joints, and grows to the height of five or six feet; out of the joints shoot the ears, which consist of a great number of grains, each about the size of a Pea, enclosed in coats or husks, which burst open with the heat of the Sun, and then it becomes quite ripe.

Millet I believe comes from Turkey. Rice grows in the East and West Indies. I need not tell you, for you already know by experience, that they make delightful Puddings; and I dare say you think Rice-milk is excellent food, and that it is right to let those People who

furnish us with such good things have a little Corn in return.

In Countries where there is no Grain to be had, the Inhabitants are under the necessity of eating Roots or Fruits; and even in some parts of our King's Dominions, the poorer sort of People are obliged, from the barrenness of their soil, and extreme poverty, which prevent their either cultivating or purchasing Wheat, to eat Cakes, Puddings and Porridge made of Oatmeal; and instead of a good dinner of Meat and Bread, are glad to satisfy their hunger with Potatoes alone. How happy therefore, my Dears, ought we to think ourselves, who have never known the want of Bread. I hope you will remember this, and let it be a rule never to waste what such numbers would be glad to have. Even the Crumbs which you accidentally let fall, might, if collected, afford a hearty meal for a little Bird, and make him merry

merry for the whole day; or would serve to divide amongst its Nestlings, which might otherwise open their mouths and chirp for food many a time, whilst the Parent Bird was seeking it with weary wings. I was very angry with you, Henry, the other day, for flinging Bread at your Sister; but I hope you will never do so any more, now I have informed you what a blessing it is; for I have seen persons who wantonly wasted Bread, live to feel great distress for want of it.

Can you tell me, Henry, what grows in this Field? Why they are Turnips. I will pull one up. This root when it is boiled is very wholesome, and excellent sauce for Mutton, Lamb, and other Meat: there is a great deal of Turnip seed sown every year for our tables, and likewise to give to the Cows, being cheaper than Hay.

Some

Some Fields are sown with Potatoes, numbers with Carrots, a great many with Pease and Beans, others with Hemp and Flax, which are very valuable commodities; when I have an opportunity I will shew you some. The stalks of Hemp and Flax, after they have been beaten, and properly prepared, are spun into Thread, of which all Linen Cloths are made; they likewise furnish the materials for all kinds of Ropes and Cords. That fine Cloth which your Frock is made of, Charlotte, once grew in a Field, and so did that of Henry's Shirt. It is made in Ireland and Scotland, but a great deal of the same sort is made in Flanders.

Flax is also spun into exceeding fine Thread, for weaving of Lace, and working upon Muslin.

Instead of these Plants, they have in some Countries, particularly in the East

East and West Indies, Cotton. Of this they make Muslins, DIMITIES and Callicoes. Cotton is a kind of down that encompasses the seed of a Tree, called the Cotton Tree. It grows in Pods about the size of a Nut; as they ripen, their outsides become black, and the heat of the Sun makes them split open; they are then gathered, and with a proper machine the Cotton is separated from the seeds, and afterwards spun for the purposes of Weaving. So you see, my Dears, there are variety of materials for Clothing; and the ingenuity of Mankind has invented many ways of applying them to useful purposes. Even the very bark of Trees is, with incredible labour and industry, sometimes converted into curious Cloth by Savages, who to us appear extremely ignorant; and there are others who weave themselves ornaments and garments of Net-work covered with Feathers.

Besides

Besides what grow in the Fields, which belong to the Farmers, the Gardens afford many excellent things. There are Cabbages, and Cauliflowers, Brocoli, Salads, Endive, Cucumbers, French Beans; in short, a hundred things very pleasant to the taste, and extremely wholesome.

Besides, you know there are Fruit-trees, the names of which, I fancy, you are intimately acquainted with; Currants, Gooseberries, Apples, Pears, Peaches, Nectarines, Plumbs, Grapes, Apricots: Don't you wish they were all ripe, Henry? Then, what excellent tarts we could make! and what feasts we should have! Well, have a little patience, my Dear, they will soon be ripe, and then you shall have plenty; but you must not eat them before they are ripe; for they will make you very ill.

I knew a little Boy, Henry, who used to look as fresh and rosy as you do,

do, and run about, and be merry all day long. His Mamma had a great Garden, and she told him not to gather the green Fruit; but the little greedy fellow would not pay attention to what she said; like a silly Child as he was, he thought he knew better than his Mamma, so he stole in unperceived, and eat the green Gooseberries, and Currants, by which means his Stomach being filled with nasty trash, he entirely lost his appetite, and his rosy Cheeks became as pale as Death; at last Worms, live Worms! came in his bowels. They were in the green Fruit, but so small that he could not see them, and he was taken very ill, and had like to have died: So when all the good Children were eating ripe fruit every day, he was lying sick a bed, and did not get well before it was all gone.—Was he not rightly punished for being so undutiful and greedy?

You

You remember, my dear children, how very beautiful the Fruit-Trees looked a little while ago, when they were in full bloom; the blossoms are now gone, and the fruits grow in their stead; they will get bigger and bigger every day, till the heat of the Sun ripens them, and then they will be fit to gather.

Apples and Pears will keep all the Winter; but the other Fruits will become rotten, unless they are preserved, by boiling them up with Syrup made of Sugar and Water; or else dried; so we must speak in time to the Housekeeper, that she may preserve us some Damascenes and Gooseberries for Tarts, make Marmalade of Quinces, preserve Apricots, and make Currant-jelly, and Raspberry-jam.

Currants, Grapes, and Gooseberries will make Wine; but that is not at all good for little Boys and Girls; they

they can be merry enough without it; and Sweetmeats must be eat very sparingly, or they will make you sick, and spoil all your teeth, I assure you.

When we can get no ripe Fruit, a little Currant-jelly, and other things of that kind are very agreeable; but as for Sugar Plumbs, and the rest of those pernicious messes, they answer no purpose in the world but to make people disrelish what is wholesome; and when they have lost all their teeth, by indulging themselves with them, it will be too late to resolve against eating any more; therefore it is better to prevent the mischief, by not eating them at all. I am sure I would not part with one tooth for all the Sweetmeats in the World.

Charlotte, if you are not tired, my Dear, we will go into the Flower-Garden: As for Henry, he is too much of a Man to complain; nay, I am ready

dy to believe he could keep upon his feet from morning to night. Come, Sir, take the key, and open the gate. This I think is the most delightful Place we have seen yet !

What shall we look at first ? There is such a variety of Beauties that one knows not which to prefer ; you admired those in the Fields, but these exceed them.

Look at those Tulips ! Examine those Carnations ! Observe that bed of Ranunculas ! And then admire that stage of Auriculas ! The whiteness of this Lilly exceeds that of the finest Cambrick. This blue Flower is a Convolvulus ; it is very like the Bines that grow in the Hedges, only they are of a red colour. Pray, Charlotte, gather one of those very little Flowers ; I have forgot its name ; but whilst one sees it near it is as beautiful and curious as the large ones. Now turn your eyes to that noble Sunflower ! that elegant Holyoak !

lyoak ! that glorious Piony !—I beg of you to gather me one of those charming Roses : how sweetly they smell ! get me also a little Sprig of Jessamine, and one Honeysuckle, for I cannot tell how to leave all these sweets behind me ; but I will not permit you to gather many, because it is a pity to spoil them. The Gardener brought us some to dress our rooms with this morning, and I know if you should pluck any they would soon be dead in your warm hands, for nothing but water will keep them alive.

Have you taken notice that every Flower has different leaves from the rest ? That some of them are variegated with all the colours you can name, and polished in the highest manner ? In short their beauties are too many to be numbered ; and when you come to be able to read books of
natural

natural history, you will be astonished to find how much can be said about them; but you are too young to understand them at present: However, I must not forget to tell you, that all Flowers grow either from seeds, or little roots taken from great ones.

None of those which grow here, would grow wild in the Fields, because the earth there is not rich enough for them. There is a great deal of trouble to make some of them grow at all; the Gardener is obliged to do many things, or they would wither away; and particularly he must water them properly; for Earth and Water are the same to the Trees, Plants and Flowers, as victuals and drink are to us; but as they are fixed to one place, and can neither fetch nor ask for it, it either comes to them in Rain, or the Gardener pours it on them with a Watering-pot.

Some

Some tender, delicate plants will grow only in very light Earth, for they could not get through hard ground, any more than you could break through a stone Wall. Other plants are strong and stiff, therefore light earth would crumble away, and leave the roots bare, so they grow best on clay : Some require a great deal of Water ; nay, grow even in Ponds and Ditches ; others will thrive only in sandy Ground. Many curious plants are kept in Green-houses ; they would not grow in the open Air in this Country, because they are brought from Foreign parts, where it is hotter than here : If you were to go to a place a great deal colder than this, you would not be able to bear it like those who always live there.

From what I told you just now, my Dears, you must understand, that there
is

is not only great variety in what grows out of the Ground, but even in the Earth itself. Look at the walks, some of them are of a yellowish red colour. That is Gravel; does it not make pretty Walks? It is exceedingly good for the Roads likewise, Henry, which would soon be very bad where there are a great many Carriages continually going, if they did not lay gravel upon them to keep them in repair. Of another kind of Earth, Bricks are made, which are afterwards used in building Houses, Walls, &c. Chalk comes out of the Earth. That is very useful to lay upon some sorts of Land, in order to make what the Farmer proposes to sow there grow the better: It is likewise burnt to make Lime of, which, mixed with sand, makes mortar for the Bricklayers to fasten their Bricks, for they would tumble down if they were not cemented together. Stone and Marble are dug out of the ground.

When

When they find a great deal together, they call the place a Quarry. Some fine Churches and Castles are built of Stone. Marble is used for Chimney-pieces, Slabs, and ornaments in elegant Houses.

Coals are likewise dug out of the Earth, with which we make Fires to warm us, and dress our Victuals. Oh! how we should go shivering and shaking about if we had no Fires in the Winter! And what would Meat, and Puddings be good for, if we could neither roast, boil, nor bake? for we could not get wood enough for those purposes.

I have not yet told you half the riches that are in the bowels of the Earth. Out of it are dug Gold, Silver, Copper, Lead, Iron, Tin; these are called Metals; look at my Watch; this is Gold. Guineas and Half
C Guineas

Guineas are likewise made of it, and it may be beaten into leaves thinner than paper. Did I not give you some, Henry, to gild your Oak-apple?

With Leaf-gold they gild Wood; the Picture Frames in the Drawing-Room appear very fine, but are only Wood covered with those thin Leaves.

Gold is the most valuable of all Metals. This Shilling is made of Silver, which though inferior to Gold, is yet much esteemed. It is used for Coffee-pots, Candlesticks, Waiters, Spoons, and an hundred other things, which people of fortune make use of. Lead is very heavy; there is great plenty of it to be had, and it is of the utmost service to us; for it is made into Cisterns to hold Water, Pipes to convey it from the Springs; Gutters to carry the wet from off our Houses; Weights, and a variety of other conveniencies. Our Saucepans and Kettles are made of Copper, which

which would be very unwholesome if they were not lined with Tin; which is a whitish metal, softer than silver, yet much harder than lead. We have many mines of it in England, and send a great deal of it to foreign countries. Half-pence are made of Copper. Iron is one of the most serviceable things we have; all kinds of Tools that are used in the Fields and Gardens, are partly made of it; likewise most of those which are employed in different Trades, have generally some Iron about them; in short, it would take up a great deal of time to tell you the whole of its value. Steel is a kind of Iron refined and purified by fire, with other ingredients; it is much prized too. Our Knives, Scissars, Razors, Needles, and many articles besides, are made of it.

All kinds of precious Stones likewise are found in the Earth; Dia-

monds, Rubies, Emeralds, Topazes, &c. They do not look so fine when they are first dug up, but there is a deal of patience and labour required in cutting and polishing them. Look at the Diamonds in this Ring; you see they are cut with a great many sides, and the light falling on them makes the appearance of such a variety of beautiful colours.

Now you see, my Dears, that every thing, when we examine it, is curious and amusing: None need go sauntering about, complaining that they have nothing to divert them, when they may find entertainment in every object in nature: But I am sure, if you are not tired, you must be hungry, and I fear the dinner will be spoiled, so let us make haste into the house. You have been told enough to employ your thoughts till to-morrow, when we will take another Walk, if nothing prevents us.

Good

Good Morning to you, Charlotte, have you seen Henry yet? I did not expect you quite so early; but hope it is a proof that my Instructions were agreeable to you Yesterday; pray see whether he is up. Are you not ashamed of yourself, you little lazy Boy, for lying in bed so late? I was obliged to send Charlotte to call you. Your Sister and I longed to be walking, let us therefore lose no more Time, but be gone.

There is the Dairy-maid milking the Cows. How comfortable the Cattle look, grazing in the verdant Meadow! I dare say the Herbage is as pleasant to them, as Apple-pie is to you. See what charming thick coats they have got. As Beasts cannot make themselves Clothes, they have what answers the same purpose growing on their backs. All Cattle have four
C 3 legs;

legs; they do not walk upright, for that posture would be both painful and inconvenient to *them*, whose food is on the ground, as they would be always stooping, which would tire them sadly; and had they only two legs, they could not move their long heavy bodies with them. Observe what hard hoofs they have got. If they had not, their poor feet would be torn to pieces without Shoes. Their great Horns serve them for a defence, in case any thing threatens to hurt them, for they cannot get Guns, Swords, or Sticks, you know.

Can you tell me what becomes of the Cows and Oxen? I am sure you cannot, therefore shall inform you. Do not run away, Henry, see how attentive Charlotte is.

Cows, as you see, give Milk; a great deal indeed, which supplies the Daries with Cream; for it is put into great dishes, and in about twelve hours

hours the Cream rises thick on the top, which is skimmed off; then when they have got enough of it, they put it into a Churn, and work it about very fast, by which means part of it becomes Butter; the remainder is Butter-milk, which is very wholesome for little Boys and Girls.

Cheese is made from Milk, and so are Puddings too, with the addition of Eggs and Flour, Bread or Rice.

The Calves are the Cows little ones, and many of them are sold to the Butchers, who kill them; their flesh is called Veal.

See that drove of Oxen! do not be terrified, Charlotte; observe how quietly they suffer themselves to be driven along, so many of them by one Drover! He will drive them to Market, where the Butchers will buy them: when they are killed, their flesh will be Beef, and their skins will be sold to the Tanners, who will make

Leather of them, and sell it to the Leather-dressers; then it will be bought by the Shoe-makers, for Shoes and Boots; by the Sadlers, for Saddles, Bridles, and other things. The Horns of these Beasts are made into Combs, Lanterns, &c.

Look at the pretty harmless Sheep, with their innocent Lambkins by their sides. Sweet Creatures! you also have got fine thick Coats; they are very comfortable to you in the Winter, when you are obliged to lie in the open Fields, in the Frost and Snow, but must make you very hot in the Summer. Well; a way will be contrived to ease you of them, for as soon as the sultry heat comes on, the Farmer will get you all together, and begin his Sheep-shearing; then all your load of Wool will be cut off, and you will spring away from him, and

and run frisking and skipping about, like little boys who pull off their coats to play.

The poor Sheep would not be so merry if they knew that they should be sold to the Butchers too, but that must be the case. Their Flesh will be Mutton, and their skins will either be Parchment, such as Mr. Green, the Lawyer, brought to your Papa the other day, and like what your Drum is covered with, Henry, or else Leather, like the outside of your Spelling Book.

The Sheeps Wool is very valuable indeed, for it is sold to the Woolcombers, who clean it, and poor old Women who live in Cottages spin it with their Spinning-wheels; Have you not seen Goody Newman sitting at her work, singing, and happy to think that she should be paid enough for it, to keep her from begging?

When the Wool is spun, it is called

Worsted, and the Weavers make it into Cloth for Mens Cloaths, Flannels, Blankets, Stockings, and other things. So that Sheep supply us both with food and raiment. But I dare say you think it very cruel to kill the poor creatures: Indeed, my Dears, it is a pity; but if some were not killed, there would be such numbers, that there would not be a sufficient quantity of herbage for them to eat, and many would die of hunger. And now, whilst they live, they are as happy as can be, have fine green Pastures to feed and play in, and when they die, have no relations to be sorry for them, or who will suffer by their deaths; because, though Sheep are very fond of their Lambkins while they are little, the fondness continues no longer than while they are helpless: for when they have done suckling them, and shewn them what to eat, they drive them away, and take no more

more notice of them. When the Butcher takes the Sheep to the slaughter-house, they know not what is going to be done, and when their throats are cut, they are but a little while a dying, therefore do not suffer much. When they are dead, they can feel no more, you know. We *must* kill them, to preserve our own lives, but should never be cruel to them while they live.

Horses are sent to Market, Henry, but not to be killed. Horseflesh is not good to eat; it is Carrion, and only fit for Dogs and Crows. They are noble Creatures; That is a riding Horse. See how he leaps and bounds now he is at liberty. But though he is so strong, can kick hard, and raise himself up on his hind legs, he is so gentle that he will suffer himself to be mounted, and guided any way. His

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legs are slenderer, and his body not so heavy as the Ox, so that he can move nimbly; neither is his back so broad, but that a man can easily sit across it. He has hoofs also, but as he travels so much, they would be worn out, therefore all persons who keep Horses should be careful to let them have iron shoes, to keep their feet from being bruised. The Smith makes them, and nails them on, which if done cleverly does not hurt the Horses at all.

Don't you wish, Henry, that you could ride on horseback? When you are old enough you shall be taught to ride, and learn to manage a Horse; but if you get on one by yourself, without knowing what to do, he may run away with you and kill you.

There was a little boy who wanted to ride, and had not patience to stay till his Papa had bought a pretty little gentle Nag for him; but got upon the Servant's Horse, which was hung
at

at the gate. He laid hold of the bridle, and could not reach the stirrups; gave the Horse a cut with a stick, and away he galloped with him so fast, that the little boy was thrown off with his head against a stone, which fractured his skull, and he was taken up dead: And yet that was not a vicious Horse, when he had a skiful rider on his back; the accident was entirely owing to the child's not knowing how to manage the bridle.

There was another little Boy, who was always running into the Stables amongst the Horses, and one day he was kicked, and had his ribs broken, for the Horse did not know that it was a little boy at his Heels.

Those fine large Bay Horses with black manes and tails, are Coach Horses; they are stronger, but not so nimble as the others; Those with great clumsy

clumsy Legs, and rough coats, are cart Horses. There is another sort of Horses, which are very beautiful and swift; they run races and carry their Masters a hunting; but it is very expensive to keep them.

We could walk but a little way in a day, as we soon tire on foot; but when we are upon a Horse's back, we can travel a great many miles, and see our Friends who live at a distance; and it is very pleasant to go in Coaches, you know; do not you love it, Charlotte? Now these pleasures we could not have without Horses; don't you think that we ought therefore to use them well? Besides, we could not tell how to manage many things without them, for it would be exceeding hard work for *strong* Men to do, what Horses can perform with ease. It is extremely fatiguing to a poor Boy, with his heavy nailed shoes, to walk by the side of a Plough all day; but do
not

not you think it would be a great deal harder to him, were he forced to draw it along through the tough ground; and how would *Men* be able to move heavy Waggon and Carts, and other great loads, without the help of Horses? So I think that the least we can do, is to give them plenty of Oats and Hay, and a warm stable at night. Don't you think those People are very barbarous who ride them too hard, who whip and spur them till they are ready to die? and yet such cruelties are exercised every day; but remember, Henry, that it is both foolish and wicked to act in that manner.

There is a poor Ass; he cuts but a mean figure after we have been viewing such beautiful fine animated creatures as Horses; but do not despise him on that account; he has great merit, I assure you, for he will do a
 deal

deal of hard work, and it costs but very little to keep him, as he will be contented with what the Hedges afford, or even a few dry leaves, or a little Bran; and requires no Stable to shelter him, nor Groom to attend him: so that poor people, who cannot afford to keep Horses, may have an Ass, and he will draw a cart, carry panniers, nay, will not disdain to lend his back to a Chimney Sweeper. Have you not seen the little grinning rogues, with their black faces and white teeth, riding on a Jack-Ass with a Sack of Soot?

I must not forget to tell you likewise, that Asses-milk is one of the finest medicines in the World, particularly for any one who inclines to a consumption; many persons who drink it get well, after they have been so ill that they were thought ready to die. Is it not very barbarous, think you, to treat such valuable creatures with inhumanity? and yet it is very common

to

to do so; I am sure it would grieve you to hear how People beat and starve them frequently.

Let me look at my Watch; it is past eight; we must return home to breakfast. Who is that? Oh! it is John coming to call us, and poor Tray with him. You are mightily glad to see us, Mr. Tray, and we are glad to see you too, for you are an honest, faithful fellow. Don't you love Tray, Henry? How he wags his Tail, and jumps about. I protest he looks so pleasantly, I could almost fancy he had a smile in his countenance. When we are in bed, and fast asleep, he keeps watch all night, and will not let a thief come near the House. When Papa goes a shooting and coursing, Tray runs about, round the fields, and across the fields, and finds out all the game for Papa to shoot; for he can smell it a great way off: Then he is
so

so good-natured that he will let the little baby play with him, and will never be persuaded to leave his Master.

Poor Tray desires no other reward for his services than a little food, and that he may have the pleasure of walking out sometimes with his master, or any body in the family. I have got the key of the Paddock, so we will go through it, and take a peep at the Deer.

There is a noble Stag, with his fine branching horns ! Do not you admire him ? and see the little frisking Fawns ! Active as you are, Henry, I think you cannot bound like them.

This kind of Animals are only kept by those who have Parks and Paddocks properly paled in, for they would not stay in the Fields, as Cows and Sheep do. Their flesh is very fine flavoured meat, called Venison.

Gentlemen often take great diversion in hunting Stags. They turn one
out

out of the Park, and then let loose a great number of Dogs, of which he is so fearful, that he runs from them as fast as his legs will carry him; a number of Gentlemen on fine swift Horses follow him, and are so eager for the sport, that they leap over hedges and ditches to overtake him. Sometimes he will lead them a great many miles; but at last his weary legs will carry him no farther, he pants with fatigue and apprehension, stops, and makes an effort to repel them with his horns, but the Dogs seize on him and tear him till he dies. I suppose there is pleasure in hunting, but I think the poor creature should be allowed to return to his Park again, in order to make him amends for the terror he must have suffered, and for the diversion he has afforded to his pursuers.

Some-

Sometimes people hunt Hares also. They go into the Fields with their Dogs, who can smell them out if they hide themselves ever so cunningly; and when they find they are in danger of being caught, they spring up, and run with all the speed they can, and practise many tricks to save themselves; but all in vain, for they are generally overtaken, and suffer the same fate as I told you the Stags do.

I don't know how it is with the Gentlemen, Henry, but I should feel so much for the poor little frightened creature, as would destroy all enjoyment of the sport. I am sure it would delight me more to save one from its distress.

Well, now for Breakfast.—Run into the Parlour, Henry; see, Charlotte! there is a good basin of milk for each of you; I dare say your walk has given you an appetite. There is nothing like air and exercise for improving Health and Chearfulness.

Whilst

Whilst you eat your breakfast I will tell you a piece of news; your favourite Tibb has got Kittens, Charlotte; there they are in a basket. Call her out to lap a little milk, and then we can look at them. -- How they mew and tumble about! They cannot now see, but in nine days their eyes will be open, and they will soon begin to play a hundred diverting tricks. When old Puss has taught them to catch mice, she will make them provide for themselves, and so far from giving herself any trouble about them, will grumble, and give them a good box on the ear, if they take any freedoms with her; but she will be a good mother to them for all that; for she will be extremely tender of them as long as they stand in need of her care, and they have no reason to expect her to catch Mice for them all their lives, when they will be as clever at it as herself.

Mice

Mice are pretty creatures to look at; but they do a great deal of mischief; and so do Rats. If we had not Cats we should be over-run with them.

I should never have done were I to enumerate every kind of animal; but must not forget to mention that there are a great number of *wild* Beasts; Lions, Tygers, Leopards, Panthers, Wolves, and others.

They have great strong claws, monstrous teeth, and are so fierce that they can tear a Man to pieces in an instant. Now, had they been amongst us like the Flocks and Herds, what havock they would have made in the world! We should not have dared to go out of doors. The Cows, Sheep, and Horses would have been a constant prey to them: but there are none here; they avoid the habitations of Men, and range the Forests and Desarts far from our abodes.

As

As their skins make very comfortable clothing for people who live in cold countries, the Hunters frequently pursue them; for as there are seldom many wild Beasts together, and there are usually a number of hunters, who provide themselves with proper weapons, they frequently get the better of them.

Sometimes they are caught alive when they are young, and shewn about as curiosities; and those who look after them have a way of managing, so as to cure them in a great measure of their fierceness: there is no Beast whatever so fierce but it may be tamed or subdued by Men. I have seen several sorts, particularly at the Tower of London, and read a very entertaining account of that collection in one of Mr. Newbery's little Books: I think you have got it, Charlotte; I desire you will shew it to Henry.

I fancy

I fancy the Queen's Elephant is at the Tower. An Elephant is a most astonishing creature, I believe, the largest of all Beasts. I cannot give you a proper description of this animal, therefore remind me, when we are in the library, to shew you the picture of one, but I must tell you how valuable their teeth are. They are Ivory, and you know there are abundance of things made of that. You have several pretty Ivory Toys, and there are Combs and Knife-handles; in short, one might soon name twenty things.

Their skin is extremely hard, and their strength wonderful, so that when they are provoked, nothing can stand before them; yet they are of a very gentle, harmless nature, and will submit to be guided by a Man. We read in history, that it was formerly the custom to employ Elephants in Armies; and that they had little wooden castles built on their backs, which
were

were filled with men who shot from them with bows and arrows. When these beasts had been sometime in the battle, they grew angry, and then they trampled to death all who came in their way, and could even beat down trees, and demolish houses. How would you like to ride on an Elephant, Henry? Why, you would look on his back like a little marmoset on a horse.

The Camel is another noble Beast, we have none of them here, only now and then one, which is shewn about as a sight. You can form no notion of him from a description, but I will look for a picture of him likewise.

In the countries where the Camels are, there are a great many sandy deserts; places where there are no houses for a great many miles, nor a tree to shelter travellers from the scorching rays of the Sun; and yet people are under the necessity of taking journeys
D through

through them, in order to carry the goods they want to sell from one country to another : it would be impossible for them to bear such heavy loads themselves, and horses would perish with thirst, as there is no water to be met with ; but a Camel will carry very great burdens, and requires no refreshment on the road ; and when he gets to his journey's end, will kneel down, that his master may be able to reach his back to unload him ; for he is so tall, that they could not conveniently do it otherwise. I could tell you wonderful things of a hundred other creatures, but that I hope you will have curiosity enough to read about them.

If you have breakfasted, and are not fatigued, we will go into the Poultry Yard. You, Charlotte, shall carry some Barley, and Henry some Tares, and I am sure we shall be welcome visitors.

See

See what a fine brood of Chickens that Hen has got; and she takes as much care of them as a fond Mother does of her Children. Do not attempt to catch the Chickens, Henry, for she will fly upon you. Yesterday they were in the Egg-shell; she laid them in a nest in the Hen-house, sat upon them three weeks, and would scarcely come off to eat, for fear they should perish for want of being kept warm. As soon as they were strong enough, they broke the shell and came out, and she gathered them under her wings; now she is teaching them to peck and scratch; and when she fears that any thing is going to hurt them, she flies at it with the fury of a Lion. Poor Hen! what will you do now? There is a Hawk! Oh how the poor creature is terrified! the little Chickens throw themselves on their backs, expecting to be caught up by his talons, and the Hen runs about in agonies;

nies; for he is too powerful to contest with. Go, Henry, call Thomas, and desire him to bring his gun immediately. Poor Hen! the Hawk shall not have your Chickens. Now, we have driven him away, come and eat your Barley.

We want some Eggs for Custards, Charlotte; see if there are any in the Hen's nest. Oh, you have found some; these are new laid; there are no live chickens in them yet, but were we to let them remain for the Hen to sit on, some would grow with-inside, and she would hatch them. But we want eggs for many uses, and were they all to be hatched, there would be too many Fowls. All kinds of Poultry and Birds come out of Eggs.

It is possible to hatch Chickens in ovens. And I have read, that in Egypt this is a common practice, and that as soon as the young chickens come out of the shell they are put under the care
of

of a Fowl, which, having been trained to the business, leads them about, scratching for them with the same anxiety that a Hen would do. This is certainly a wonderful thing; but for my part, I do not approve of such unnatural proceedings. I am sure we may have a sufficient number of eggs and chickens in the usual way, if we manage them properly. It appears to me a robbery, to take the chickens from their parent, and put them under a fowl, which provides for, and protects them, only because it is his business, to feed and attend little chickens. It is like taking a child from its mother, and putting it to nurse, without her consent, in a place unknown to her. But I have the pleasure of hearing, that hatching chickens in ovens has been tried in England, and rejected.

There is another foolish custom, which is indeed very common here, I

mean that of putting Ducks eggs to be hatched by a Hen. You can scarcely conceive the distress it occasions. The Hen, not conscious of the exchange that has been made, supposes she has hatched her own chickens; for she has not sense to reflect on these matters; therefore, when she sees them go into the water, as it is their nature to do, she is seized with the most alarming apprehensions lest they should be drowned, and yet dares not attempt to follow them, as she is not able to swim. I am sure you would pity the poor creature; therefore never make such experiments, as they only serve to gratify curiosity, by proving, that it is warmth that hatches eggs.

It grieves one to be obliged to kill any of the poor Chickens; but as I told you in respect to the Sheep and Oxen, were we to suffer them all to live, they would die of hunger, and cause us to do so too, for they would
eat

eat up all the Wheat and Barley, and we should have neither Bread or Meat for our use. But we will take care to feed them well, not hunt them about; and put them to as short pain as possible. I am sure I could not kill a Chicken; but somebody must.

The feathers of Geese and Chickens are what our Beds are filled with.

Don't be afraid of the Turkey-cock, Henry, he is a saucy fellow, but has very little real courage. Turn towards him, and he will run away from you, as you did from the Man who held up his stick at you for flinging stones at him.

Chickens and other Fowls have very sharp claws, that they may scratch about in Dunghills, and at Barn-doors, where they usually find plenty of food; besides, their feet have several joints to them, so that when they

sleep at night they still hold fast round the roosts, and preserve themselves from falling. Water-fowls usually sit on the ground to sleep. They endeavour to find a snug Corner; but a little damp does not injure them.

Cocks are noble Birds, and very fierce; sometimes they will fight till they kill one another, and there are people in the world who are cruel enough to make them do it for their own diversion.

They get two of these fine Creatures, and fasten sharp Spurs to their Legs, made of polished steel; then they put them in the middle of a round place, covered with turf, called a Cock-pit, while they stand about them, hallooing, swearing, and saying shocking wicked words, whilst the Cocks fight till one of them dies. Oh, Henry! I hope you will never take pleasure in such barbarous sports. I can see that your tender heart is moved with the
bare

bare relation of it. I could tell you many stories of the bad consequences of Cock-fighting, which has frequently been the ruin of those who were fond of it; but hope, before you are a Man, you will entertain such sentiments as will effectually preserve you from the danger of practising it.

I will tell you of another kind of barbarity which is practised by cruel wicked boys on Cocks. On a particular day in the year, called Shrove Tuesday, they assemble in parties, and sling cudgels at these poor harmless creatures, till they kill them. First, one little Tyrant throws at a Cock, and perhaps breaks a leg; this is mended, as they call it, with a piece of stick tied to support it; and then the next boy flings, who, it is likely, may knock out an eye; another blow, perhaps, breaks a wing; and scarce a stroke fails of crushing some of its tender bones: as long as strength remains

the tortured bird attempts to escape from his tormentors ; but continued agony soon obliges him to drop. If he discovers the least remains of life, he has still more to endure ; for they run his head into the ground to recover him, as they say ; this makes the creature struggle ; and he is set up once more : a few blows now completes the cruel sport, and he drops down dead, whilst his murderers exult over him, and call themselves very clever fellows ! What do you think of such Boys, Henry ? Is there not a great deal more pleasure in seeing the happy creature pecking at the barn door, strutting on his dunghill, clapping his wings, and crowing with joy, than to see his noble courage subdued in this manner ; his bright eyes hid with a deadly film, and his beautiful plumage covered with dirt and blood ?

See

See that stately Swan, how magnificently he sails along, with his silver wings expanded, to catch the fresh breeze. And pray observe his mate, with what pride she leads forth, from the nest, her new hatched Cygnets! Of all the water fowls I ever saw, the Swan appears to me the most beautiful.

That simple looking Goose cuts but a mean figure in comparison of a Swan. Observe how she hiffes and waddles along! However, we must not despise any thing merely for its looks; Geese are very useful creatures, and we are in some measure obliged to them for all the learned and entertaining books we have, since they were originally written with pens made of quills taken from Goose-wings: besides, Geese afford us many excellent meals; for when roasted they are very good eating. This Goose, you see, has got a numerous brood of Goslings; and here is Mrs. Duck too, with a fine

train of Ducklings; now they go into the Pond, now they swim away: They are amphibious; that is, they can live either on Land or in Water. Observe the feet of the Geese and Ducks. It is the same with every other Waterfowl; they are webbed, and so serve like Oars you have seen the Watermen use to row along with.

There is another kind of Birds, called Birds of Passage, such as Quails, Wild Ducks, Plovers, Woodcocks, Swallows, &c. these do not constantly reside in one place, but go from country to country at particular seasons of the year. They all assemble together on a certain day, and take their flight at the same time. Some cross the seas, and fly many hundred miles, which is very wonderful.

Pray look at the Peacock. Did you ever see a more beautiful sight?

He

He spreads his resplendent tail, which the Sun shines on, and shews it to perfection. There is one of his Feathers on the ground. I desire you both to examine it particularly. The nearer you look at it the more admirable it seems.—And pray pick up some of those which the Pigeons and other Poultry have dropped; you will find them worth examining. I would have you accustom yourselves to look at every thing; that is the way to gain knowledge.

Did you ever see any gold and penciled Pheasants? They are charming Creatures. All Birds, I think, are pretty; even the Owl and the Crow are not to be despised when you see them near. But if you are not satisfied with the little information I have given you, we will read some Books of Natural History, which contain accounts of a great variety of Birds, and are extremely entertaining.

There

There are many forts in this Country, and numbers different in other parts of the World; but I shall not present give you a description of them all, because you must take the pains to read them yourself. I shall only mention the Humming Bird and the Ostrich.

One species of the Humming Bird is a little creature, scarcely bigger than an Humble-Bee, and so beautiful, that Ladies in the Country where they are wear them in their ears for an ornament. The Ostrich is remarkably large, and something resembling a Goose, but taller a great deal than a Man; their Eggs are so big, that I have seen drinking-cups and sugar-dishes made of their Shells; and their Feathers are very fine. Those beautiful ones which have lately been so much in fashion are Ostrich plumes; and so are those fine black ones which are put upon a hearse. These Birds are
too

too heavy to fly, but they have short wings, which are of great use in helping them along; and they run with surprising swiftness.

They do not sit upon their Eggs, but leave them to be hatched by the Sun.

I must go into the House now, so pray take leave of these favourites of yours for the present.

There is little Dick Williams coming in at the Gate; I fancy he has something that he thinks will please us. What have you got there, Child? a Bird's Nest! oh fye upon you, to rob the poor things of what cost them so much pains to make. The young ones, you say, are flown; well, Henry, take it in your Hand, and I will tell you how the Birds built it.

Two of them agreed to live together, for though they cannot talk as we

we do, they can make one another understand; so they set about building them a House. First, they got some small sticks and hay, then in a snug place, which was not likely to be found out, they began the outside, then they picked up some moss and horsehair, after all they lined it with feathers, the Hen-bird laid her eggs, and her mate sang to her whilst she sat over them: At last, out came the little Birds, and away flew the old ones to get food for them. As soon as they had found any, they came hurrying with it to the nest. When the young ones heard the sound of their Parents wings, they chirped and opened their mouths, as much as to say, "*feed me, feed me.*" The old Birds fed them one after the other. Sometimes the Hen sat upon them a little while to warm them, then abroad she went for more food; and so the old Birds kept on till the young ones were

were strong enough to fly, when they went along with them to shew them where to get food, and how they must shift for themselves, and all their care about them was over. As soon as the little Birds are big enough, they will build nests too, and do as their Parents have done.

I am always angry with those who take Birds Nests, when I think how many miles the poor creatures may have flown to procure the materials, and how hard they must have worked, with no other Tools but their Beaks and Claws to build with.

We should not like to be turned out of a comfortable warm House ourselves, though few of us have the ingenuity to build one. The Farmers indeed find themselves under a necessity of destroying some kinds of Birds, for eating the Corn; and hundreds are killed on that account; besides, there are great Birds, such as Hawks and
Kites,

Kites, which devour a great many, so they have enemies enough without little Boys. For my part, I would willingly spare them some of my Fruit, to pay them for their Music, and would not have my sweet Blackbird killed, which sings so charmingly in the Orchard, were he even to eat up all the Cherries.

You have got a Canary-bird in a Cage, Charlotte; I hope you take care to feed him well, and keep him clean. He never knew what liberty was, and therefore does not want it; nay, if you should turn him loose, he would starve and die; besides, he could not bear the cold air out of doors in the Winter, because Canary-birds were first brought here from a hotter country, and only build in houses. But should you catch a poor Bird which had been used to fly about, hop from
twig

twig to twig, and sing amongst the branches, he would at first flutter, and almost beat himself to pieces against the wires of the Cage; and when he found he could not get out, would sit moping in a corner, and refuse to eat or drink, till extreme hunger and thirst obliged him; and long would it be, ere he would be reconciled to confinement.

I knew a little Boy, who was otherwise good, but so exceedingly fond of Birds, that he would try every means in his power to catch them. One day he had fixed some traps made of sticks and brickbats, and being called away to go to School, forgot to mention his traps. He did not come home till a week afterwards, when the first news he heard was, that a poor Robin had been caught in one, where he remained till he was starved to death; a Sparrow was crushed to pieces, and another had his leg broke:

Now,

Now, would not any good little Boy have been very sorry to have tormented the poor things in this manner? And so was he, and I hope has never caught any since. But I must leave you now, for I have many things to do; and so good bye to you.

The Weather continues so remarkably fine, Charlotte, that I long to be abroad. Do you vote for a walk? Henry, I am sure, will attend us, so let us equip ourselves and be gone.

What is Henry running after? Oh! it is a Butterfly, I see; well, you have caught it, poor little tender creature! take care how you handle it; would you believe it? all that powder which comes off on your Fingers, is feathers. I have seen some like it in a Microscope, and will shew some to you by and by.

Try

Try if you can find a Caterpillar. Why, you have got several sorts! well, I have a long history to tell you about them when we go home. See what a nest of little ones are in that Web in the Hedge! As soon as they were big enough to go to work, they spun it to keep the wet off; the Dew, you see, hangs without fide, and does not penetrate through. There are more! bless me, there are thousands! We have had such dry weather lately, that I fear the Gardens and Fields will be overrun: they will destroy all the Cabbages; the Birds may feast away, for they eat Caterpillars as the larger Birds destroy *them*.

Behold what a swarm of very minute Insects are there, like a cloud before us! You would scarcely suppose that these little creatures, when seen with a magnifying Glass, are very beautiful, and adorned with magnificent fringes as fine as gold and silver,
with

with elegant tufts of feathers ; and some parts appear like velvet embroidered with pearls. Every one of them is furnished with weapons of defence, and all have enemies to defend themselves against ; each has some particular plant or herb to feed on, and knows where to seek it. There are some so exceedingly small, that they cannot be seen at all with the naked eye, but, when seen, are as wonderful as the rest.

Look how busy that Spider is at her work. Your silly maid has taught you to be afraid of Spiders, but I hope you have both of you sense enough to get the better of such ridiculous fears. Pray consider how much stronger you are than they, and how much larger. It is true they will sometimes drop down suddenly, but that is from fear of your hurting them ; how often are their Nests and Webs cleared away ? But I never heard

heard that a Spider took a Broom and swept a little Boy away, or trod one to Death. I desire you both to take notice, that when a Spider drops down it always runs away as fast as it possibly can, therefore certainly has no design against you. I tell you what, as they dirty our Houses, and cobwebs have a very untidy appearance, I must desire that the Housemaid will keep them away; but I am sure little Boys and Girls may take a good lesson from spiders, and learn both industry and exactness; for their Webs are woven with the most perfect regularity. You will be exceedingly pleased to read an account of their method of working, and I shall shew you parts of them in the Microscope.

Take care, take care, Charlotte,
mind where you tread! why you
might have destroyed a City for aught
I know.

I know. Look at those little busy Ants; they are at work as hard as possible. Do you know that they get all the Corn they can, and lay it up against the Winter comes? They bury their Dead, carry their young ones about, and do many laborious things. If all Men and Women were as provident as they are, there would not be so many Beggars.

Let us go and see the Bees at work in their glass hives. See, they are in a great bustle; surely there is some curious Work going on. Curious, indeed, my dear! all the Honey and Wax we have, is the Work of these little Creatures. They fly about, and with a kind of trunk they have, they suck something sweet out of the Flowers: Others get materials for the Wax, and form the Honey-comb, in which the Honey is deposited. Are they not very surprising? The cells join exactly together, there is no room lost. This whole

whole swarm of Bees are subject to one Bee, which we call the Queen; they follow her wherever she goes, and will suffer themselves to be killed, sooner than forsake her. But I must not tell you every particular about them, because I want you to read the account yourselves, in the Books I mentioned to you. Most People keep Bees in straw Hives, and burn them as soon as they have finished their Combs, in order to get their Honey; but I bought these glass ones, on purpose to have the pleasure of seeing them work, without being obliged to kill them. When the Honey is taken, you shall see how it is managed, and I will treat you with some for your Supper. Should you at any time have a Cough, or Sore Throat, I will make a Medicine, with Honey in it, which will help to cure you: So pray remember how useful Bees are, and never hurt them. Keep

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in mind also, that not even the least of these Creatures, which I have shewed to you, are idle ; all are employed. They don't saunter away their time, but take care of their Families, and build Houses. The young ones learn readily what the old ones shew them how to do ; and little Boys and Girls should likewise be desirous of improving from the Instructions that are given them. It is a great deal of trouble to teach Children all that is necessary for them to learn, and very expensive. If they do not accept of Knowledge when it is offered, people will grow tired of instructing them ; and they will be laughed at, and despised for their Ignorance. The Days pass heavily along, when spent in Idleness and Folly. You may now go and divert yourselves as you please, and in the Afternoon come to me again.

See,

See, I am prepared for you ; here is the Microscope ; in it is a magnifying Glass, that is, a Glass which makes every thing appear larger than it does to the naked Eye ; some magnify a great deal more ; but this will answer our purpose. Now all the Wonders I told you of will be presented to your sight. In this Box are a set of Objects, ready prepared for us. Now the Glass is fixed. Pray Sir, let the Lady look first ; if you are a Philosopher, do not forget you are a Gentlemen. Can you guess what this is, Charlotte ? Do you look, Henry. It is only *part* of a Feather of a Goose, but appears like an *entire* one. This is a bit of a Peacock's, examine it before I put it in ; now view it, and you will perceive it to be perfectly beautiful. I am going to shew you the Feet, Wings, and Head of a common Fly, this is its Leg, see the Claws ; the Head appears to have an hundred

Eyes. I must shew you the parts of a Bee. See what a dreadful Weapon the Sting appears. Ah! Henry, I hope you will be cautious how you catch Bees again; and I am sure you will not take a pleasure in tormenting Flies, now you have seen what limbs they have. You may assure yourself, that they suffer great agony when their Wings and Legs are torn off. I never could endure, without great uneasiness, to see a Cock-chaffer spinning, as they call it, on a pin. The noise and humming it makes is its way of crying and groaning. Let me beg of you therefore, Henry, if you wish to be thought a Boy of a generous Spirit, never to take pleasure in hurting any thing that is less and weaker than yourself. Think how you should like to have a Man tie a string about you, and pull you along, whirl you about in the Air till you lost your Senses, break your Limbs, and

and perhaps throw you down at last,
and tread upon you.

I must shew you this Bean; you know I told you that all plants grew from Seeds; this is the seed of a Bean. I have split it open, and at the bottom you may see the little Plant. It is at present too tender to bear the Earth next to it, so you see it is provided with a covering. The white part of the Bean will nourish the Plant till it is stronger, when it will spring out, and the white will drop off, and leave it to the Earth, where it will encrease every day, till it grows up and comes to perfection. It is just the same with all Vegetables, from the humble Grass to the stately Oak, only, in very little Plants we cannot discover them without exceeding good Glasses.

I had like to have forgot, this Butterfly's Wing, there you see the holes where the Quills came out, and here some of the bits of

Dust, which you may convince yourself are actually Feathers. I must shew you this little Insect which came off a Rose Leaf, and here is a drop of Vinegar full of little things like Eels.

You must not pore too long, for it will hurt your Eyes. I have only shewn you these, to convince you that a curious search may discover new wonders; and were you to keep on to the end of a long Life, you would not see them all.

What does your Brother say, Charlotte? That he wishes his Eyes were Microscopes. Alas! my dear Boy, you know not what you wish for. If that was the case, we should see very surprizing things, to be sure, but then, what we now look at with pleasure, would become monstrous to us. Men and Women would appear so large, that we could only see a bit of them at once. We should not know a House from a Wall, an

Ox

Ox from a Mountain, and should be involved in a thousand difficulties. If we came to a Kennel, we might mistake it for a River; take a Cat for a Tyger, a Mouse for a Bear: in short, absurdities out of number would follow. So rest contented, that your Eyes can see with ease every thing that is useful or hurtful to you; and if you want to be curious, there are Glasses, you know, to assist you.

I promised you the History of Caterpillars, and make it a rule never to break my Word, so pray attend to me.

I believe, I must fix upon Silk Worms, because they are the most useful to us. First of all they are in little greyish Eggs, which may be laid by in a drawer till warm weather comes the next year, when they must

be put where the Sun shines hot; in a little time they break, and out come small grey Maggots; those who keep them, pick them up, and lay them upon Mulberry Leaves; they grow apace, for they eat all day long; in a few days the Skins come off, and they look a little handsome when they have got new ones: Soon after they change them again, and then are pretty white Worms, larger than before, as big as one of your Fingers. They soon begin to look yellowish, leave off eating, and go to work: first they spin a sort of Wool, then they form a Ball, the size and shape of a Pigeon's Egg, and are quite hidden from our sight; but their Business is not yet complete, they make a Lining withinside, a great deal closer woven than the Cloth of a Man's coat.

Their Silk is extremely valuable, and all the fine Clothes which Ladies wear

wear are the works of these little crawling Insects. Who would be proud of being dressed in Silks and Sattins, when they know this to be the Case?

A great many of the Balls are put into warm Water, and those who are used to the business readily find the ends. They are obliged to put several together to make the Silk of a proper size, and they wind it off in Skeins upon a little Reel then they come to the linings I told you of, which they cut open with a pair of Scissars, and use them for making artificial Flowers. But what do you think they find withinside, Silk Worms? no, nothing the least like them, but Cryfalises, as they are called. A Cryfalis is a brown thing the size of a small Bean, somewhat of the shape of a Barrel, no Head, no Legs, no Body to be seen; but if you touch it, one end will move a little, which shews that it is not

quite dead. In this state it lies some days, and breaks forth a large white Moth, with two black Eyes, four Wings, long Legs, and a Body covered with Feathers: view it through a Microscope, and you might take it for a Chicken. Is it not very astonishing? It truly is, but not more so than many other things. Almost all things in Nature, whether they have life or not, undergo as surprising changes.

You want to keep Silk Worms, Charlotte; I am always glad to indulge you when I can, and will let you have a few next Summer, because, I could wish you to see these curiosities yourself; but you will never be a Silk Merchant, nor will it answer to Ladies to keep a great quantity of the Balls. Besides, they are reckoned unwholesome when there are many of them together, and it is dirty, troublesome work to change the Leaves they feed on twice a day.

a day. The case is different in those warm Countries, where they are on Mulberry-Trees in the open Air, help themselves, and spin amongst the Leaves. It must be a pretty sight to see the shining Balls, like golden Plumbs, amongst the green Branches.

All Butterflies and Moths undergo the same changes, though they do not all spin Silk: some creep into holes in Walls, others into Houses, and some into the Earth, and there become Crysalises, and remain in that state from the end of one Summer to the beginning of the next, when the Butterflies come out in all their variegated beauties; and instead of crawling about, soar in the Air, and amuse themselves with flying from Flower to Flower.

a day. The case is different in those
warm countries, where they are
All these Trees in the open Air, hang
themselves, and spin amongst the
Leaves. It must be a pretty sight to
see the shining Balls like golden
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into the Earth, and there become
Crysalides, and remain in that state
till the end of one Summer to the
beginning of the next, when the But-
terflies come out in all their variety
of beauties, and instead of crawling
about in the dark and smoky
caverns with shining flowers to

flowers.

World was no bigger than the Town

~~the Men and Women in it; for now~~

you know better, for I think I have

A N

told you, that there are thousands

and ten thousands of People; You

and ten thousands of People; You

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Easy Introduction, &c.

PART II.

The World is an exceeding large

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COME here, Henry and Charlotte,
look at this Globe. Do you
know what it was made for? Why,
small as it is, it represents the whole
Earth.

When you were very little Chil-
dren, I dare say, you thought the
World

World was no bigger than the Town ~~you live in, and that you had seen all~~ the Men and Women in it ; but now you know better, for I think I have told you, that there are thousands and ten thousands of People: You have ~~seen a great many at Church,~~ but they are only a small number of what the Earth contains. When you go to London, you will be quite astonished at the Multitudes, for they croud along the Streets in the City, like Bees in a Hive, and are as busy too.

The *World* is an exceeding large *Globe*, and *this* before us is a kind of *Miniature Picture* of it. You see here vast numbers of Lines drawn ; one part is painted *blue*, another *red*, another *yellow*, another *green* ; they stand for different Kingdoms.

It is not possible to draw every part ~~of the great World on a Globe,~~ any more than
World

than it was for the Painter to mark every hair of the Eyebrows on this small Picture in my Bracelet. Here is a *Pea*; now you see this is of the same form as the *Globe*, but we should not be able to describe so much upon it; and yet we might represent the large green and yellow places, &c. by dots of different colours, and call them *England*, *France*, and so on, just to shew what situations those Kingdoms have.

In the same manner then, as the *Pea* resembles the *Globe*, the *Globe* resembles the *World*.

The Earth is not smooth and even, as this *globe* is; because there are many Mountains and Hills on it; but though we call them large, and so they are to such little creatures as us, they are no bigger in proportion to the Earth, than grains of Sand would appear here; therefore we say it is round.

Neither is the World all Land, for there are vast hollow places between the different Kingdoms, and they are filled up with Water. The largest Waters, such as this on the Globe, are called Oceans, less ones Seas, and there are others yet smaller, which run in among the land, that are called Rivers; there are, besides, smaller pieces, called Ponds, Ditches, Brooks, and others, which are used for supplying us with what is necessary to boil our Meat, brew Beer, clean our Houses, water our Gardens when there is a want of Rain, and likewise for the Cattle, and other living creatures, to drink. These generally spring out of the Earth, and are at first only little Streams, but run along till they join with others, and are increased by the Rains that fall, and so in time become great rivers like the Thames.

As the Land is full of living Creatures, so are the Waters, for they abound

bound with Fish, many of which are caught for us to eat. Some People are very fond of Angling with a Line and a Hook, but I cannot help thinking it a very cruel sport, and always was of opinion that it is an idle one also, and never had patience to follow it. To sit hour after hour watching a floating quill; what an employment!

I was told of a Gentleman, who, after sitting a whole day in a mizzling rain, was asked by a Friend that saw him in the Evening what success he had had! Fine sport! fine sport! said he, three bites and a nibble. I should have caught one Fish, only my line broke, and it swam away with the hook. This Person might truly say, indeed, that he had done no harm, but in so many hours, how many good Actions might he have performed? If none should rest contented without endeavouring to improve their time, what do they deserve who trifle it away?

Now,

Now, let us have another peep at the Globe. See what a great part of it is water. Now, suppose we were to take a number of those Mites which I shewed you to-day in the Cheese, and set them to crawl about the Globe, they might serve to represent the Men and Women that inhabit the Earth. As there is no real water on the Globe, only a Picture of it, the Mites might go which way they pleased; but suppose the places which stand for Water were really dug hollow, and made into little Seas and Rivers, how would they contrive to get across them to any other part which the Water came in betwixt? It is the same with us, for we should never be able to reach parts beyond Sea, unless there was a contrivance to cross it.

This place is Great Britain, the Kingdom we live in; you see it is quite surrounded with Water. Now, suppose we wanted to go to France, what

could

Now

could we do? Why, first we should travel either in a Coach, Chaise, on Horseback, or some other way, to Dover, for it is too far to walk thither. At Dover, we should meet with a Packet-boat, that is, a small vessel, which carries letters and passengers to France; as soon as the Wind was fair for us, we should sail away for Calais, as you have seen the pleasure Boats do. Then we should go on by land from one place to another, till in time we might reach the City of Paris, where we should find as many People as in London, and see a great number of fine things. In this route we should pass through French Flanders, the country where Cambrick and Lace are made.

Were we to talk English in France, none would understand us, so we must learn to speak French before we go, or they will take us for vulgar, ill-bred persons, because it is known that all genteel

genteel people in England learn that language.

When we had seen one foreign Country, it is most likely we should wish to see others, therefore we might go into Italy: And, as we travelled through the South of France, we should see a great many vineyards, which are fields planted with grape-vines; you know that wine is made from the juice of grapes. We should also visit places where Silk-worms are kept; and you would find that they produce such quantities of Silk as furnish a very considerable trade. We might travel by land from France to Italy; but must pass over some high Mountains, which divide Italy from France, called the Alps, the tops of which are always covered with Snow, and there is a great deal of Ice on them all the year round.

You

You have seen in the Winter both Ice and Snow, but did you know that they were only Water? The Snow would have been Rain, only the Air being excessively cold, made it freeze in falling; but as soon as the Weather became warmer, it dissolved, and the Ice thawed, as we call it, and then both were Water again.

After this fatiguing and frightful passage over the Alps, where you would be in danger every minute of falling down dreadful Precipices, and of being dashed to pieces, but that the men who carry you are used to the ground, and can run as fast on it as you have seen little boys do on a wall. After this, I say, you would arrive in Italy, and there the beautiful appearance of the Country would quite transport you; for it is deservedly called *the Garden of the World*. There are Myrtles and Orange Trees growing wild in the Hedges, as our Hawthorn

thorn does here. Don't you wish we could make such Hedges in England? Should we attempt it, Charlotte, I fear the first Winter would intirely destroy them, because the air is so much colder here than it is there. You know the Gardener always carries the Myrtles and Orange Trees into the Green-house in the Winter.

The Fruits in Italy ripen much better than ours do, and therefore have a richer flavour; and they have in great plenty several sorts which do not grow here, particularly abundance of Olives, which, when pickled, many people are very fond of; besides, there is a great deal of Oil made from them; part of which they sell to us, and is what we dress our sallads with. There are Silk-worms in Italy also, on the Mulberry-trees. The Sky in that Country is mostly of a fine blue colour, and the Sun shines brighter than it does here.

The

The Houses are very magnificent, and most of them large; some are built of Marble, for they have a great many Quarries of it, and their Churches are most magnificently adorned with fine Pictures, large silver Crosses, Candlesticks, and a thousand other curiosities, which occasion many people to travel thither in order to see them; and particularly the noble buildings which were erected a great many years ago, and are now falling to decay.

But amongst the Curiosities of Italy, I must not forget to mention Mount Vesuvius, a large Mountain, which sometimes bursts out with an astonishing noise, much louder than thunder, and casts forth flames, with hot ashes and cinders, many miles distant; numbers of houses are sometimes destroyed, and people are killed by these Eruptions.

tions. A fiery matter, called Lava, issues from the Mountain, and runs with a most rapid Stream for several miles together, carrying away every thing before it, till it reaches the Sea, which boils and hisses in an astonishing manner when the Lava reaches it.

Suppose we were there, Henry, do you think you should like to go up the Mountain? What say you, Charlotte? Had you not rather live in England, and be contented with what it produces, than go to live near a burning Mountain, to enjoy all the fine things I told you of?

There are numbers of these Volcanos, (as they are called) in the World, the largest we know is Mount Etna, in Sicily.—When you are older you shall read a description of it in Brydone's Travels, which will astonish and delight you.

I am entirely of your mind, Charlotte; were I to go into that Country, I should

I should endeavour to get courage to view it near, but should approach it with trembling steps. Do not think, though, that these Mountains were only made to frighten and destroy people. Like all things else they have their use. There is a great deal of Fire within the Earth, which if it had not places to vent itself at, might do a great deal of worse mischief, nay, destroy it entirely.

The persons who live on these Mountains seem to enjoy Life as well as others; and as there are usually some Years between the Eruptions, they plant Vines and other things, which prove very fruitful; and the Mountain usually smokes, or they hear noises from it, which shew that it is near bursting, so they sometimes save themselves from the danger, by removing for a time.

When you are older, Charlotte, you shall read books of Travels, which describe what is worth observation in every Country. Perhaps Henry may be a Traveller himself, for you know Gentlemen often make the Tour, as they call it, and it is very right they should see the World, if they take care to get sufficient knowledge before they go, to enable them to make proper observations; but for an ignorant Person to visit foreign Countries, is only to publish his own shame wherever he goes; because every one who sees a Gentleman that has left his own Country to visit their's, naturally enquires what he is, and should they find him deficient in knowledge, he would deserve to be laughed at and ridiculed; but should he prove sensible and well informed, his company would be sought for, because he can give an account of places and things which they have

mate agrees with the Natives, that is to say, those who are born there, better than any other would do; and the People in one land make themselves as happy as others who have greater advantages, usually think their own country the best in the World, and would not change it for any other.

You are an ENGLISHMAN, Henry, so you must love England the best; and if you travel all the World over, you will never find a better country. Here we have neither such piercing cold, nor such scorching heat, as some countries are subject to; we have plenty of corn to make bread; barley to brew beer; wool to spin for clothing; flax for linen; the best roast beef in the World, and many other comforts. And we have Artists and Manufacturers to make every thing we actually stand in need of; in short, Old England is a very desirable place, and here your friends live, so that I make

no doubt, my dear boy, you will return from your travels with great pleasure; tell us, who stay at home, what wonderful things you have seen, and love your native land better and better. But you must not despise the People of other countries because they do not speak, act, and dress, as we do, for to them we appear as strange as they do to us.

I must now tell you a little about the Sea. You know I said that between the different Kingdoms on the Earth, there are vast hollow places. Pray observe this large space on the Globe, it is called the great Southern Ocean. You have seen a Fish-pond, which is so deep, that if a man stood at the bottom, the water would cover his head; but that is no more than a cup-full, in comparison of this great Ocean. Only look what a space it covers on the Globe; then cast your eyes

eyes to those parts of the land which stand for the greatest Kingdoms. Observe, the Sea is a great deal the broadest, it is so deep in many places, that they cannot get a Line long enough, with a piece of Lead tied to it, to reach the bottom. When the Wind blows very high, it drives the waves up like great mountains of water, which roar and make a frightful noise when they tumble down. Sometimes Ships are driven about so by the wind and waves, that they are thrown upon Rocks, which are a sort of ragged Hills in the Sea, as hard as stones, some of them of an enormous size, even above the surface of the Water, others concealed under it. All Sea Water has Salt in it, which may be separated from it by boiling; Salt is so serviceable to us, that after having been accustomed to it, we should not know what to do without it, particularly for Meat, which, by

being well rubbed with it, may be kept many months.

The reason that the fresh Water in Rivers does not spoil, and grow good for nothing, is, that it keeps running continually from the fountain head, that is, the place in the Earth it first springs from, towards the Sea; and where there is a tide, as you know is the case in the Thames, it is owing to the ebbing and flowing of the Sea, which sends the Water of such large Rivers back again every day.

The Sea is in constant motion, and you would think it very astonishing, to stand on the shore, and behold how majestically its mighty Waves follow one another, rolling with a solemn and pleasing noise; gradually advancing till they gain considerably on the Shore, and when they have reached the bounds allotted them, and it is high tide, they retreat in the same manner to visit the opposite Shore.

Philo-

Philosophers tell us that it is the Moon which influences the Water, and occasions the ebbing and flowing of the Sea; and I fancy you will be of their opinion, when you are old enough to understand Mr. Nicholson's Introduction to Natural Philosophy.

Henry wishes to know where all the Water that fills the Sea, comes from. Indeed I cannot tell, perhaps it may spring out from the middle of the Earth: I rather think it does, and that there is a great collection of Water there; but it is of no consequence to us to know that, we are certain that it is of the greatest use to us, and can see enough to admire in it, without searching for its source.

If the hollow places had been left empty, instead of being filled up with Water, how frightful they would have appear'd! It would have been impossible to have got across to any part what-

ever. You think we might have had Wings to fly over, Charlotte? Why I must own, that when I have seen the little feathered race soaring over our heads, and sporting about in the air, I have been tempted to wish for a pair of Wings myself; but when I considered how large they must have been to have carried such heavy bodies as ours, - I am apt to think we should have found them very troublesome incumbrances, and am sure we are better without them. But had there been those immense Abysses I was talking of, and we could have contrived to make a clever pair of wings, we could not at any rate have flown far without resting, and therefore must have tumbled headlong, and been dashed in pieces.

Besides, had there been any Fishes, they must all have died, because they can no more live out of the Water for any considerable time than we can
live

live in it; and now there are various kinds, as many, perhaps, as equal the number of the different sorts of living creatures on the Land. Some so astonishingly large, that I know not what to compare them with; others as minutely small; many extremely beautiful, others frightful to behold; some of them are most delicious food, and are caught in great quantities with nets. The Turbot we are to have for dinner to-day came out of the Sea, and so do Soals, Whittings, Cod-fish, Salmon, Lobsters, and many others.

Should all Fishes keep in the wide Ocean, there would be but few caught, and none but Sailors could eat them; but they come in shoals to the narrow parts of the Sea near Land; and Fishermen, whose business it is, go out in boats, throw nets into the Sea, and catch them; then some are sent to all great Towns, and from thence sold

to every place to which they can be carried before they are tainted or spoiled: some again, such as the Cod on the Banks of Newfoundland, are caught with a hook, and very long line; a bit of fish, or red-rag, is fastened to the hook, and serves as a bait to entice the fish to it. They are then salted, and sent in ships to different parts of Europe, which furnishes employment for a great number of Sailors, and is an extensive and profitable branch of commerce.

If we did not eat Fishes, the larger kinds would, for they prey on one another as Birds and other animals do. In Books of natural history there are a great many entertaining things concerning Fishes. Only think what a deal of pleasure you will have, Henry, when you can sit still long enough to read them, and are sufficiently improved to be able to understand them!

In

In many of those books there are pictures of what they describe.

I forgot to tell you, that Fishes have no Legs. You know it. Oh! I beg your pardon, Sir, I did not recollect what a Man I was talking to; give me leave to inform you, however, why they have not; because they have no use for them, and would find them very awkward things; their Fins answer the purpose of Swimming much better.

Many Fishes have very sharp Teeth, others Thorns at their sides, and various weapons of defence; and instead of clothes, are covered with Scales, which the water cannot penetrate.

There are a great many things growing at the bottom of the Sea, called Sea-weeds. I have a Picture in my Dressing-room, made of them; you have often admired them, Charlotte.

Indeed,

Indeed, they are extremely curious; the Fishes, I suppose eat them.

Besides those I have been speaking of, that swim about, there are a vast number of Shell-fish. That Cabinet which stands there is filled with Shells: it contains great variety, but there are, for aught I know, hundreds more. Some are much larger than any here; others, you see, so small that you could not perceive them unless they were laid on white paper; and yet in the Microscope they would appear to as much advantage as the Insects did. Observe what curious shapes and variety of colours! I know my dears, you admire this beautiful collection, and well you may! every one of these Shells formerly had a Fish in it; it used to come part of the way out, as you have seen a snail do, and draw back again at pleasure; they generally remain at the bottom of the Sea, but sometimes Storms throw them
on

on Shore, where they are picked up and kept by curious People.

There is likewise Coral, both white and red. Here is a bit of each; that beautiful yellow substance by it, is Amber; it makes elegant cabinets and other things; and the Ladies in former days were fond of wearing necklaces of it.

All Pearls come out of the Sea too; there are great quantities to be met with in a particular kind of Oysters, and people called Divers, have the skill to sink themselves to the bottom of the Water, and by means of some ingenious contrivances to supply them with air, are able to stay long enough to get a great many Pearls, which they sell for a deal of money; and those who can purchase them, think themselves very fine when they are adorned with them.

Peo-

People of fortune should have handsome Clothes, Jewels, and other ornaments, because it is very right for them to dress better than their Inferiours, who could not afford such things, as they find it hard to get money enough for the bare necessities of life; therefore Persons who have plentiful Fortunes ought to encourage Labour and Ingenuity, by laying out some part in buying what others sell and make to procure themselves and families a livelihood: but it is very wrong to value themselves on Riches and fine Clothes, for they should consider, that Gold, Silver, and Jewels came out of the Bowels of the Earth, therefore they could not *make* nor probably *find* one of them: that their finest Silks are spun from the entrails of a little crawling Worm, and that after it is spun they could not use it, till it had gone through the hands of many poor Workmen:

What

What would the Rich do without the Poor? Could they make their own Shoes, build their Houses, plough their Fields, fell their timber Trees, shear their Sheep, and a hundred other things absolutely necessary to be done by somebody? They should therefore learn to behave with kindness and condescension to the industrious, and remember, that the meanest Artificer, if he discharges the Duties of his station, is preferable to themselves, unless they are distinguished as much by their Benevolence and Greatness of Mind, as by their Rank and Riches.

The Poor should never forget how much they are obliged to, and how greatly they depend on their Superiors; but treat them with all possible respect, and never envy them; for, as they have no Money nor Land of their own, they must perish for want of necessaries, unless they could obtain some by their labour. If they are so
 fortu-

fortunate to be paid for what they do, they can purchase what they want with the money, you know, and may in their humble condition, enjoy an equal share of Happiness with the rich, and avoid many anxious cares and dangers, to which an elevated station is frequently exposed.

I dare say you did not think there were so many curiosities at the Bottom of the Sea, nor should we ever have known it, but by the Invention of Ships, which was a very curious and useful contrivance. Fine China, Muslins, Calicoes, Spices, and other Articles, are brought from the East Indies in Ships, which carry back in exchange what our own Country produces; they also convey to England vast quantities of Tea, which is a plant that grows in the East Indies in great abundance; the leaves of it are dried,

dried, which make them curl up, and then they are packed in boxes and canisters, and sent to different parts of the World: But a good basin of Milk, or Tea made from herbs, which our own Gardens supply, are in my opinion greatly preferable, and much wholesomer for us.

From the West-Indies we get Sugar, which is produced by boiling the juice of a particular sort of Plant called a Sugar-Cane; the Inhabitants have large Plantations of it, which bring them in a great deal of money; but the poor Negroes undergo severe hardships, who are employed to work in the Plantations.

Negroes are black people; many persons in England, you know have them for Servants. Abroad they toil like Horses, and are frequently much worse used, which is an exceeding barbarous thing, for they are *Men* as well as their Masters, though they are
of

of that black colour; but how much does it pain me to tell you, that this inhuman commerce which puts these poor creatures into such a dreadful situation, is carried on by Englishmen, and even authorized by our own laws.

From Spain we get Oranges, Lemons, Nuts, Almonds, Figs, and Raisins, (which last are dried Grapes); from Lisbon the same, besides those Articles a great deal of Wine. If there were less of that it would be better; for many people drink so much of it as to hurt their constitutions. Would they make it a rule, to drink only when they were thirsty or weary, and leave off drinking as soon as they were refreshed, they would preserve their healths, and might perhaps live many years longer.

I could mention the productions of other countries, but do not intend to travel round the Globe with you. I shall only tell you that there are many things

things valuable and worth observation in every part of the World; and those which you have no opportunity of seeing, you may read of in Books, which will give you much better accounts of things than I am able to do.

You find, my dears, what great use Ships are of, but how shall I make you understand the nature of a voyage? I will take you both to Mr. Wilson's, where you will see a Model of a Ship; that is, a little thing made exactly like one, only a great deal less, as you will judge by the figures which represent the Sailors. Mr. Wilson will explain the Masts, Sails, Ropes, and other parts, which I am totally unacquainted with.

When a Voyage is to be taken, the Ship is first perfectly repaired, if it is not a new one, so that it may effectually keep out the Water and not sink.

link. The Sails and Masts must be in exact order, strong, tight, and whole, that they may be able to stand the force of the Winds; then they lay in a great quantity of Biscuits, as bread would soon get mouldy, several Casks of fresh Water, for that in the Sea is very nauseous, some Barrels of Salt Beef and Pork, because they cannot get fresh Meat when they launch out into the wide Ocean, and leave the Fields and Meadows behind them. They carry as much Garden stuff too as they conveniently can; when it is gone, they are obliged to make shift without, till they land somewhere to get a fresh supply.

A Ship which goes on a Trading Voyage, besides a stock of provisions, takes in her Cargo, that is, the Goods which the owner proposes to sell in foreign countries; such as Wool, Watches, Hardware, I mean Knives, Scissors, various kinds of Tools, and numerous

rous Articles which other Nations are glad to purchase from England, because they are made best here. Every Ship requires a certain number of Men, some more, some less, according to the size of the Vessel; for there is always a great deal of work for them to do, especially in stormy weather. One time all the Sails must be spread in order to receive the Wind, at other times all must be furled, or taken in, to prevent the Vessel's being overfet by violent gusts of Wind. They have large iron things on board called Anchors, with very great Ropes, or Cables, which are tied to them, and fastened to the Vessel, and when they want to keep the Ship in a particular place, they cast them into the Sea, where they can reach the Bottom, and they stick into the Ground and fasten, so as often to preserve the Ship from being lost. Somebody on board is obliged frequently

to

to keep letting down a line with a large leaden Plummert, that they may know the depth of the Water. A man called the Pilot, stands at the Helm, and directs those who hold it: The Helm turns the Rudder, by which means they can steer the Ship any way they please; the Pilot must be a person who knows that part of the Sea very well.

When the Vessel is perfectly fitted and ready for her Voyage, the Captain is impatient to be gone, and keeps himself and all his jolly Tars in readiness to sail with the first fair Wind; but I believe I must inform you what I mean by a fair Wind. Let us just step out of Doors. Now look forward; that is East, behind you the West, on the right hand the South, on the left the North. Now you know, that when the Wind blows behind

hind you, it forces you along; when you face it, if very high, you can scarcely stand against it; but it does not always blow the same way; let us go in and look at the Globe. Here is the East, West, North, and South; now if they want to sail to a Country which is North, they must have a South Wind to blow them along, for if the Wind were in the North it would be impossible for them to get forward; so that sometimes a Voyage is made much longer than it would have been, from the Winds changing about from one corner to another, which often obliges them to go to other places, if it blows very high; but they are not obliged to return for every change of Wind, because the art of Navigation teaches the Sailors a method of managing the Ship, so that they can get on by crossing backwards and forwards, though

G

if

if it blows right it saves them a deal of trouble.

It is a very surprizing thing to think of, but it is really true, that in some parts of the Sea the Wind will blow constantly for Months together every Year, the same way, which enables Ships to reach the Places they are wanted to go to; and then the Wind turns and blows the direct contrary way, which brings them back again: Therefore people contrive these Voyages so as to endeavour to get to those parts time enough to have the benefit of them: They are called Trade Winds, or Monsoons, and these Arrows on the Globe, shew the particular parts of the Ocean they blow in.

When people are out in the wide Ocean, they are frequently whole Months

Months together without seeing any thing besides Sky and Water, excepting what their own Ship contains. Look here, for instance, in the middle of the great Southern Ocean : It is very distant from the Land, and there are no Paths marked out on the surface of the Water, to shew the nearest way to any place ; but those who have been there formerly, have kept the exactest account they could, of the Rocks they escaped, the little Islands they met with, and other particulars, which serve those who come after them, as some rule to go by ; for there are Maps, or Pictures made of those Parts of the Sea, called Charts, which people who sail that way carry with them ; by which means they know how to escape Rocks, Quicksands, Whirlpools, and other dangerous things, which are described to be in particular Latitudes. You must at present be contented

without an explanation of the word Latitude; you will know all about it when you learn Geography.

But after all their clever contrivances, they would be utterly at a loss without a Compass on board, which is an Instrument that looks like the Dial of a Clock, only, instead of the Hours, they put East, West, North, South; in the middle comes up a little Spike, upon which is a Needle that has a small hole in the middle of it, to receive the little Spike, upon which it hangs very lightly. This Needle must be rubbed on the Loadstone, which gives it the remarkable property of pointing always to the North. One of these Compasses is fixed on board every Ship, and when they look at it, they can tell where the North is, and order the Ship accordingly; because they can either sail towards the North, or from it, as suits their purpose, you know. But I shall
soon

soon get beyond my knowledge here, Henry, and must own myself a very indifferent sailor; so I have done with Navigation; but must say a little more about the Loadstone or Magnet, as it is certainly a most wonderful as well as useful thing.

The Loadstone is hard, very much resembling Iron, and usually found in the mines with that metal. It attracts or draws Iron and Steel, so as to make them stick to it. If you rub those metals upon it they will attract also, though in a less degree. Here is a Magnet with two pieces of Steel fixed in it; they are called its Poles, one the North, the other the South. Now let us see what effect they will have on these Needles which we work with: I will lay them on the Table. Hold the Magnet over them; see how they jump up; you would think they were alive; but it is only that

the Loadstone draws them; they would lie still enough if there were no Loadstone near them. Now take notice, I will touch two others, one at each Pole. If I attempt to bring that which has been touched by the North, to the South Pole, it will drive it away, and so of the other, which is called repelling it.

I will give you this pretty little Magnet, Henry, which I have got in a case. It is only a piece of Steel that has been rubbed in the manner I said, but will divert you very much. How the Loadstone performs all this, I cannot tell, any more than I could inform you where all the Water in the World comes from; but there are many things we see that we have not wisdom to understand perfectly; happy it is that we can learn so much as we do.

Don't you think, Henry, that it is very entertaining to hear of all these wonderful things, which I have been
telling

telling you of ? and will you promise me to endeavour to remember them ? Why, you will be able to instruct William by the time he is as big as you are now ; and will not that give you Pleasure ? Now you may go and amuse yourselves ; I have a hundred things more to tell you, but would not tire you with too many at once ; so adieu for the present.

Well, Charlotte, I see by the preparations you have made, that you intend to solicit me for a Walk. It will be equally agreeable to me after the heat of the Day, and our little Beau will, I make no doubt, attend us. Come hither, my charming little fellow ! you are so good-natured, Henry, and so attentive to my Instructions, that I am happy to have you by my side. Charlotte and I are going to walk in the Fields, and could not bear

to go without you, though I fear we shall be obliged to make you sit up beyond your usual hour.

We will first walk up this shady Lane, where we may gather Bachelor's Buttons, and numbers of other Flowers, which were not blown the other Day; there will be fresh ones continually till the Summer is over.

Who will get over the Stile first? The Gentleman, to be sure, and then he can hand the Ladies, you know. Take care! take care! Henry, do not be in too great a hurry, lest you tumble, and that would be a sad disaster, to see our Beau rolling in the Dust. Now we are all safe.

What a delightful prospect is here! How rich the Earth looks, with the beautiful mixture of Pastures, where the Flocks and Herds are feeding, and Corn Fields almost ripe for Harvest, which promise Bread for thousands!

lands! How cool and refreshing does that River look, winding along amongst them. Then that majestic Wood! where grow Oaks, which perhaps will one Day be made into Ships, and plough the Ocean to bring us treasures from distant Lands. But above all observe the glorious Sun! he appears to be now sinking in the West, but To-morrow will shew himself in the East. I think I have never told you any thing about him, and indeed I scarcely know what to say, because many particulars which are known concerning him, you could not at present be able to understand. However, you may depend on it, that I will never tell you any thing but truth; and if you do not comprehend me now, you undoubtedly will, when it shall be repeated to you some time hence, when your understanding will be improved. You must endeavour to gain a little knowledge every day,

and in time you will have a considerable share.

Well, the Sun then, is supposed to be a very large Globe of Fire, but different from any that we know. It is thousands and thousands of times larger than the World we live in. It keeps every thing that grows, alive, by its heat; for in all Plants and Trees there is a juice called Sap, which if the Sun did not melt, would be so thick that they would not shoot out. You know, that in the Winter all the Leaves drop off the Trees, and there are no Plants or Corn growing; that is because the Sun shines but little at that time of the Year, rises late and sets early, so that the Earth has but little of its heat, to what it has in the Summer, when it appears by four o'clock in the morning, and we do not lose sight of it till eight at night.

The

The Sap has not time to get thick in those short nights; besides, the Air though cooler in the Night than in the Day, retains a great degree of heat, and is not like the chilling cold of Winter, even at *Noonday*. I saw you very curious the other Day, Henry, examining the Carpenter's Glue-pot, when he was at work in the House. Did you not observe that the Glue was very thick before it was put on the Fire, but when it had been on some time, it melted and became quite thin? Now we may compare the Sap in the Trees to Glue, because like that, it requires heat to melt it. If the Glue-pot should be put on a Fire and taken off soon, it would not be much melted, and if it stood off a long while would be quite hard; but if you set it on long enough to dissolve it entirely, and keep it from the Fire but a little while at a time, it would never get cold and thick. In the

same manner the Sap is affected by the Summer and Winter. The continued heat of the Sun in the long warm Days, dissolves it so entirely, that it cannot get thick in the short Nights, and on the contrary, in the short cold Days, it does not receive warmth enough to melt it.

Winter is a dreary, unpleasant season, though of very great use, as it prepares the Earth for the growth of the various Fruits which the other Seasons produce, and in its turn is exceedingly beneficial to our Healths, though were it to continue always, we should be in a terrible situation; but as it is only for a little while, we do very well, because there is plenty of Provision both for Man and Beasts, laid up in Barns and Ricks. There are Coals and Wood, to make us cheerful Fires, and there has been Wool

Wool enough taken from the Sheep's backs, to furnish us with Flannels and other warm Clothing. When we have felt the pinching cold of this uncomfortable Season, we are the better prepared to enjoy the lively one that follows. How agreeable it is to see the Trees which have been stripped of their Leaves, renewing their Verdure; to behold the little Crocusses and Snow-drops peeping out of the Ground; to hear the little Warblers chanting forth their Notes, as if they were singing Songs of joy; and to observe the poor People come out of their Cottages with cheerful looks to pursue their daily Labours, now no longer hindered by Winter's Frost and Snow, which must have been dreadful to those who could not afford themselves good Fires and warm Clothing.

I am going to tell you a very surprising thing, Charlotte. I dare say
you

you think the Sun goes round the Earth. It does not, I assure you; it is fixed, and the World goes round it once in a Year. Before they discovered how large the Sun is, People thought as you do; but now we might as well suppose, (as Mr. Ferguson said) that if you had a fowl to roast, it would be necessary to keep a great Fire going round it, while the spit remained immoveable. No, I think indeed if the Earth wants so much assistance from the Sun, it is very well worth while to travel for it; and thus the matter really is ordered.

But we must begin to think of returning, for there is a deal of Dew on the Grass, and I fear we shall wet our feet, and catch cold. This Dew is very refreshing to the Earth, and as acceptable as a Glass of Water to you when you are thirsty.

There

There is, as I told you, a great deal of Water in the Earth, but in Summer it lies very deep, and could not get up of itself to moisten the Plants; however, the heat of the Sun draws it, and when he sets, it falls and supplies the want of Rain, of which you know there is but little in the sultry Weather. Much of it would do a great deal of harm; spoil the Hay, beat down the Corn, and a hundred bad things. After all the Crops are got in, it is very necessary to make the Earth fit to receive the Seed, and to help it to grow afterwards; for were the Ground to continue always as dry as it is now, there would be great difficulty in breaking, and turning it up with a Plough, and the Seed when sown, would not swell at all; however, the Sun not only draws moisture out of the Earth, but much more out of the Sea, which goes up high in the Air, and gathers into Clouds, that are

are driven about by the Winds, till they come over different parts of the Land; and when they are too heavy, they break and fall down in showers. You may have some notion of this, if you put some Boiling Water in a Teapot, and cover it with the lid. When it has stood a little while, if you take the lid off you will find drops of Water withinside. The heat which the Fire left in the Water caused them to rise up. In the same Manner the Sun acts in respect to the Sea, and perhaps the Fire that is withinside the Earth may heat the Water at the bottom, and help to make the Vapours rise.

Why, I shall make a little Philosopher of you, Charlotte! I do not mean, my Dear, to excite a desire in your Mind of entering too deeply into the study of these things. I would only have you read some easy Books on the Subject, that you may not, like

like the ignorant common People, think the Sun a little thing, the size of a Plate, and placed in the Heavens only to be gazed at. I am glad we are almost at home, for it begins to be very cool, and I imagine you wish to go to rest. To-morrow evening we will once more look at our Globe.

Oh! you are come to claim my promise, which I shall gladly fulfil. Now for the Globe. I told you that the Sun remains always in the same place, and that the Earth goes round it once in every year; besides that, she turns round every Day. You think it strange to move two ways at once. Not at all. Why, you can do the same, I am sure; you may keep turning about, and contrive so to change your place every turn, that you can get from one end of the
Room

Room to the other by degrees. What I want to convince you of at present is, that the Earth's turning round is the cause of Day and Night; you must therefore suppose this Candle to be the Sun standing still. Now, I will put a little Pin in the middle of this side of the Globe next the Candle, another in the side which is turned from it. When I turn the Globe about, the side which is now dark will be enlightened, and the light side will be in darkness. This is a representation of what happens to the Earth every Day and Night. These places on which the Sun shines have daylight; those on which he does not shine are in darkness: By this means all parts of the World have the benefit of the Sun's heat to warm and ripen their several productions; and likewise to refresh the Earth, Plants, and Animals; for you know it is after the Sun disappears in the Evening
that

that Dews fall. The parts of the Earth which are represented here where the Wire comes out, are called the Northern and Southern Poles. They are very cold places; for sometimes the Sun is not seen there for several Months, and then they never lose sight of him for several more. The reason of this you will be told, when you are taught the use of the Globes, for which I will procure you a more able Instructor than myself. I shall only tell you, that the absence of the Sun is not so great a misfortune to those people who are subject to it as it would be to us; because those Countries where it happens do not produce the same things which England does; and all that grow there naturally are so formed, as to be able live in that climate. The Inhabitants are as happy as we; they work hard in these months while they have Daylight, and lay up stores for their
long

long Winter, when they dance and sing, and are as happy by Torch and Lamp-light as our Country Lads and Lasses when they celebrate Harvest-home, enlightened by the mild beams of the setting Sun.

In the last mentioned Countries they catch Whales also, which I must give you some little Account of.

They are Fishes of an enormous size. I have read of some two hundred Feet long. You, Charlotte, know how much a Foot is, but Henry does not. This piece of string is a foot long. You can count a hundred; one, two, three, four, five, &c. very well; only think then of a living Creature two hundred times as long as this piece of string! What large Eyes he must have! And such a Throat, that he can swallow a Man up at a mouthful; and yet this Creature

ture may be overcome, and vast numbers of them are killed in Greenland, particularly by people who go from Holland. Find Holland on the Globe. This is the Frozen Sea, so called, because there is generally a great deal of Ice in it. The air of this place is so cold, that one would think nothing could induce People to venture thither; but many do, for their Voyages are very profitable. They have a particular kind of Vessels on purpose for Whale Fisheries; and when they see one they immediately throw a sort of Dart at him, called a Harpoon, which sticks in, and wounds him, and then he sinks under the water, with the Harpoon sticking in him; but there is always a string tied to it, with a large Gourd fastened to the other end; this floats on the Water, by which they know whereabouts the Whale is, and wait for his rising up again, when they are ready

ready to strike at him with their Harpoons, till with repeated Wounds he dies. When they have killed him, they lash him to the side of the vessel, or find means to drag him up on the Ice or Shore, and cut him in pieces, and put his Fat into Casks, which they boil and make Oil of, and sell it for a great deal of Money when they return home, for it is useful in dressing several sorts of Skins, likewise Wool, and in a hundred other things.

The People who live in that cold Country, where I told you they continued for several Months without the light of the Sun, burn this Oil in Lamps; and it is quite a treasure to them.

The large Whales have two monstrous Tusks, sometimes fifteen feet long, which rise out of their jaws, and serve them to gather the Weeds together, upon which they are supposed to feed: These tusks are split,
and

and made into what we call Whale-bone; which is likewise sold to great advantage; for it is used in Stays, Whips, and many other things. The Inhabitants of these Countries catch a number of wild Beasts, and make very comfortable Clothes for themselves of the skins.

I hope you perfectly understand me, my Dears, in respect to the Earth's turning round. You do, you say, Charlotte; but Henry looks a little doubtful. You think if it were so you should tumble off. No, you would not; for there is something in the Earth which draws you towards the Ground, in the same manner as a Loadstone draws Iron and Steel. Pull your Magnet out; take up this Needle: there, see, if you turn them round an hundred times, it will not drop off; and if you pull it away, it will

will fall towards the Magnet again. So if I was to hold you up high, and let you go, you would tumble to the Earth, because it draws you. The Steel of which the Magnet is made is hard, and therefore the Needle cannot enter it, but sticks to the outside; the surface of the Earth is likewise hard, or we should be all drawn into it. The Needle has no life in it, therefore cannot move about on the Magnet, or it might go all over it, because one part does not draw any stronger than another. We, you know, are alive, and therefore can change our place upon the Earth; but were we to attempt to fly into the Air, we should infallibly tumble down; and not only People, but every thing on the Earth is affected in the same manner. If we ride upon a Horse, we are still attracted, but his Body supports us from falling to the Earth, because it is impossible for us to tumble through a Horse;

Horse; but if by any accident he shakes us off, down we come to the Ground immediately.

You wonder we do not feel the Earth move. Why, do you think this little Mite which stands here on the Globe can feel that move? I dare say he cannot, but seems to himself to stand quite still while it is turned round; for all that he sees about him are moved as well as himself, and therefore he remains in the same place on the Globe. Could he be taken in a moment from this part of the Globe to that, and had the understanding of a Man, he would be convinced that it really does turn round, because he would find the face of the Sky perfectly changed: for suppose he was removed at Midnight, when the Moon was shining, and the Stars glittering in the Heavens, he would, to his astonishment, find himself in broad Day, enlightened by the Meridian Sun.

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But

But till you are older you cannot understand much about the Stars, and, indeed, I know but very little of them myself; sufficient, however, to fill me with wonder and admiration. I am convinced in my own mind, that it is possible there may be thousands and ten thousands of Suns and Worlds, many of them much larger than this which we inhabit; it is as probable to me, as that we might roll thousands and thousands of Marbles about different parts of this Earth, without their touching or coming in one anothers way; because I am sure there is room enough for them in the Heavens; and, I think if you turn your thoughts that way, and read what has been written on the subject, when you are old enough, you will be of the same opinion.

What

What do you say, Henry? Do you think that the People on that part of the Earth, which is opposite to us, stand at this time on their Heads? Indeed, my Dear, they do not; they have their Feet upon the Ground, and their Heads towards the Sky. The Trees, Plants, Houses, and all, are the right end upwards. They cannot possibly fall into the sky; it would be nonsense to say such a thing.

The Air we breathe in entirely surrounds the Earth in the same manner as the peel surrounds an Orange, or the shell a Nut; but is so thin that you cannot see it. You know that Chocolate is not so thin by a vast deal as Water, and Water is a great deal thicker than Air; for we can see that, but cannot see Air. If it was not so very thin we could not breathe in it. Every time we fetch our breath we draw in fresh Air; if we drew in Wa-

ter in that manner it would drown us. When we draw in fresh Air we throw out that which is become hot, by having been in our body. Convince yourself of what I say; put your hand to your mouth, and draw your breath: does it not come out warm? but the open Air feels cool to your face. If there was no Air we could not live; and if we could live we should not be able to breathe; it is of use to us in a hundred respects, being necessary for the preservation of all living creatures in the World. Even the Fishes have Air Bladders, which are of infinite use to them. The Trees and Plants in general would die without Air, and we should have no Winds, which you know are very useful, as I told you before, in respect to blowing the Ships along, and driving the Clouds about, so that they may break and fall in different places on
the

the dry Land, instead of returning back to the Sea, from whence the Sun draws the Vapours that form them.

The Wind is a great stream of Air; and though it sometimes does mischief, yet it is of infinite use, as the Air would become extremely unwholesome if it was to remain still and motionless.

Now, I have made you turn your thoughts to the Sky, I must not forget the Moon, for that is a very beneficial thing to us. She is not a Globe of Fire, like the Sun, but supposed to be like the Earth we live in. All the light she has is borrowed from the Sun, for the light goes from him to the Moon as it comes down to us; and the Inhabitants, if there be any, living on the outside as we do, see the light in the same manner, and in all probability enjoy equal advantages

on;

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with

with us, from his warm, refreshing beams. Could we be removed thither, our Earth would appear to us like the Moon, only larger. The Moon and Earth are both so large and thick, that the Sun cannot shine through them, but only make them look bright, as even the Candle will do any thing that it shines upon, which could not be seen in the darkness.

Take this gold Watch, put it in a dark place, and it will not be seen; let the Candle shine upon it, and it will appear very bright, because it receives the light; so it is with the Moon; we see that part light which the Sun shines on. Sometimes it is but a very little Crescent, at other times a full round Moon. The Sun always shines upon half of it at once; but it happens that part of that half may be turned from us. I can make you understand this better by
 the

the Globe than from any Description.

We will suppose it to be the Moon, the Candle the Sun, and your little round head, Henry, to be the World. Now, you see the whole of the light side fronts you, but move the Globe a little from the place it now stands in, or move yourself, and part of the dark side will be towards you. We can see no more of the Moon than that piece of the enlightened part which fronts us, that is like a half Moon. Go round to the other side, and you will see there is no light shining on it; it appears very different from the other: and you would not see it at all, only that the whole room is enlightened by the Candle; but in respect to the Moon itself, you can see no part of that which the Sun does not shine upon, any more than you would see this Globe if the Candle was taken away.

The Eclipse, which you were so entertained with a little while ago, was occasioned by the Shadow of the Earth falling on the Moon, which always happens when the Earth is in a straight Line between the Sun and the Moon. You see if I place a Screen, or any thing between the Candle and the Wainscot, the Shadow of it will be seen on the Wainscot; there is the shadow of my Hand; put yourself, Henry, in this place, and we shall see your Shadow; that is to say, as the Light cannot shine through you, you keep it from falling on that part of the Wainscot which is opposite to you.

I shall say nothing to you about the other Planets, Comets, fixed Stars, Milky-way, &c. because I fear they would puzzle your little Heads too much at present, but some time hence shall let you have Mr. Newberry's Philosophy of Tops and Balls, which is a
 clever

clever little Book, and Ferguson's Gentleman and Ladies Philosophy, which contain enough of these Sciences for a Lady to know ; but should Henry wish to learn more, his Papa's Library will furnish him with Nicholson's Introduction to Natural Philosophy. It grows very late. Henry, how have you been able to keep your little Eyes open so long? Good Night !

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Library will furnish him with Michael-
son's Introduction to Natural Philo-
sophy. It grows very late, Henry,
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little eyes open so long? Good Night!

A N

Easy Introduction, &c.

P A R T III.

I FEAR, Charlotte, that the Rain will prevent our walking to-day, therefore take your Work and sit down with me. If you are able to remember what I have told you lately, you have made a very considerable addition to your stock of Knowledge. Do not you think, even from the

slight view we have taken of the works of Nature, that there must be something delightful in the pursuit of these Studies? I hope you will always have a taste for so profitable an amusement. I have as yet only sown the seeds of Knowledge in your mind, but shall be happy to assist your own industry in the cultivation of them, and hope you will find the felicity of your life increased, by pursuits so properly adapted to your nature.

We have examined a variety of Flowers, Plants, Trees, &c. and find them all most wonderfully formed to answer the purposes they seem to have been designed for; likewise the Elements, Fire, Air, Earth, and Water, and every thing that the Earth and Sea contain. Animals are still more curious, and we have discovered that they are of a Nature superior to Vegetables, or any in-
animate

animate production of the Earth; that every one is furnished with what is necessary for its subsistence, and has as much knowledge as it has occasion for, in order to preserve itself from harm, and to take care of its young, as long as they stand in need of assistance.

But you see, my Dear, that there is no living Creature which resembles us. Every thing appears to have been made in some measure for our use, and we are able to apply them to our purposes; therefore Man is properly called, *the Lord of the Creation*.

In many respects indeed we seem to be inferior to Animals, for numbers of them exceed us in strength, swiftness, sight, hearing, smelling, and other particulars; let us therefore endeavour to find what it is that raises us above them. The subject is very important, therefore pray give me
your

your attention, and I doubt not, but you will understand me.

Man at first is a little helpless Infant, unable to assist himself in the least; and were he not attended with the most tender and assiduous care, would perish miserably with cold, hunger, and nakedness: what would become of little William, think you, if there was no person to clothe, feed, or take care of him?

The young of other Animals have in general warm Furs or Feathers, are able soon to provide for themselves, and to do all that their nature requires; but it is a long while before a Child can take care of himself, for he does not even know, till experience teaches him, that Fire will burn, Water drown him, and a thousand other things necessary for his preservation.

How-

However, he keeps gaining strength and knowledge every day; in a short time has the use of Speech, is able to distinguish one person from another, takes notice of every thing he hears, sees or touches, and is soon superior in understanding, to the most sagacious animal in the World; though still very far from possessing either the Strength or Knowledge of a Man.

You cannot remember, Charlotte, the time when you were such a little Child as William, but can recollect that you were not always so big as you are now; you, I hope will continue to grow and learn; but do you think that Tray has grown at all, or learned any thing lately? And as for your Canary-Bird, does not he sing the same notes, over and over again? You may observe that there are Children of various sizes, and have, even in your short Life, seen those who were great Boys and Girls, attain the height of
Men

Men and Women: You have seen Kittens grow to Cats; Puppies to Dogs; Chickens to Fowls: in our growth then we resemble the Animals, only we are a much longer time before we attain our full size.

We are like them too, with respect to Flesh, Bones, Skin, Blood, Eyes, Ears, Teeth, Legs, Feet, and many other particulars.

We as well as the Brutes, Birds, Fishes, and Insects, are kept alive by eating and drinking. Our Body, as well as their's, when it has attained its full proportion, improves no more, and in the course of a few Years, when Old Age comes on, grows feeble, the skin shrivels, the Teeth drop out, there is a visible decay of Nature, which at last sinks under infirmity and dies; the Body is then buried, and turns to dust and ashes; and were it to be mingled with that of Dogs and
Cats,

Cats, or the meanest of Animals, could not be distinguished from them.

This would be a melancholy story, if it were the whole of the History of Humankind; but I hope to convince you presently, that we have something in us that never dies; for it is a certain truth, that we have Souls as well as Bodies, and that the Soul continues to live after the Body is dead.

I can describe the parts of the Body to you, for they are visible to the Eye; but the Soul cannot be seen. You may however soon convince yourself, that you have something in the Body very different from it.

Look at the Animals; they can like us, eat, drink, walk, sleep; like them, (as I said before) we must be sustained with Food, or our Bodies would perish. It is the Body then that eats, drinks, walks, sleeps, and at last dies.

Now

Now have you not found that whilst your Body was perfectly at rest, when you were sitting by yourself, that you could recollect a hundred things which you had formerly heard or seen? Cannot you contrive what you will do, even years hence perhaps? Do not you sometimes feel joy, at others, sorrow? Cannot you wish and resolve? If you see any thing in pain or distress, do not you feel compassion for it? You can understand what other People say to you, and inform them what you like or dislike; can every day learn to know something more; can say to yourself, how can such and such things be so and so? and then think about them, till perhaps without being told, you discover what you want to be informed of. Or should it be a subject above your capacity, you can ask information of others, make them know your meaning, and understand their explanation of things.

Now

Now these operations of the Soul are infinitely above what the most sagacious Animal is capable of. They just know how to provide for themselves, that is to say, to seek for food and to eat it; to take a tender care of their little ones, for a certain time; and to use those Weapons of defence which they are furnished with, against their natural enemies; but are no wiser, at Twenty years old, than at Twenty Months.

You do not see them examining any thing in nature any farther than to look and smell at it, in order to discover whether it is good for them to eat. You never hear them conversing together, and telling their thoughts and opinions, as mankind do; because they have not thinking Souls. They have not REASON, they cannot invent Arts and Sciences. Every Bird of the same kind builds its nest alike, which shews that they do not think as we do;

do; for if they did, there would be variety in their Works.

Mankind are for ever producing new and curious Inventions. There is scarcely any thing in Nature, but one person or other can make an ingenious use of it: For instance, what Animal in the World could have made this Watch? see how extremely curious the inside of it is. If I were capable of explaining its entire construction, you would not be able to understand it. Thus much you can however comprehend, that it is composed of a number of Wheels and other parts; here is a delicate steel chain; there is a Spring; here a Pendulum; now all these things together, when it has been wound up by the Key, till the Chain is all wound upon that part, keep in motion till the Chain gets all on this place, which is twenty-four Hours. Under the Glass you see is a Dial-plate, with the twelve hours mark-

marked on it, and little dots between; each of which stands for a Minute. There are two hands moved by the Spindle which comes up in the middle; *that* is put in motion by the Works withinside. These hands point out, one the Hour of the Day, the other the part of the Hour which has elapsed at the time you look at the Watch. The shortest hand only moves from one large figure to another in one hour, the other goes from twelve to twelve in the same time, which is sixty minutes, so that you may always know what time of the Day or Night it is, by looking at the Watch: Indeed you have long been able to tell what it is o'clock, and therefore I shall say no more about it: but do not you think that the making such a machine required a great deal of thought and contrivance?

If we had only Bodies void of Thought, as the Animals have, no
such

such thing could ever have been made; no, not so much as a Chair or a Table: for without the power of thinking, we could not have applied the Creatures to our use.

Now if we think it necessary to do what we can to nourish and preserve these Bodies, which are of so perishable a nature, that they may be cut off in a moment, or if they escape from being destroyed by Diseases or Accidents, will most certainly decay with Old Age, and sink into the Grave, is it not of infinite consequence to us to study what we can do for the Soul, which I hope I have convinced you is so much superior to the Body.

I told you that the Soul shall live for ever; I can with equal truth assure you, that it depends on ourselves whether it shall be happy or miserable to all Eternity, that is, for a life without end.

I have

I have often, my Dear, informed you, that there is a Divine Being called God, who made you and all things in the World; and you know I have taught you to pray to him Night and Morning. I forbore to say much to you concerning him, because I knew the subject was too sublime for your tender Mind. I flatter myself, you are now able to understand me, and am eager to tell you of his *Goodness*. Young as you are, I think I can *convince* you, that there really is a God.

Suppose you had found a Watch, discovered its use, and how admirably it was adapted to serve the purpose, could you suppose that it had made itself?

Should you look at a House, could you imagine that it grew out of the ground, when you have seen Carpenters, Bricklayers, and other Artificers employed in building it? Now what must you think of the World
and

and its productions, of which you know we have lately taken a general view?

It is not in the power of the wisest Man in the World to make even a blade of Grass, and still less must be expected from the Animals, which, as I have shewn, are inferior to us. It is evident, from the construction of every part of Nature, from the noblest to the most insignificant, that they are all admirably formed; they must therefore have been the work of some wise, powerful BEING, infinitely our superior. We can no otherwise account for our existence, than by supposing that we are likewise the work of his Hand, for we know we did not create ourselves, nor have we yet met with any creature that could form us.

As we did not make ourselves, neither can we preserve our Lives. And even our REASON, which so eminently

nently distinguishes us above all other Creatures in the World, would be of no use towards supplying our bodily wants, unless the World had been furnished with materials to exercise it with; but the World affords us all we want; **ALMIGHTY GOD** has been pleased so to construct it, that it furnishes sustenance for all the living Creatures it contains; but none have so large a share of its Blessings as Mankind. We therefore are certainly bound to be thankful to our gracious Creator, for the innumerable Benefits he has bestowed on us; but how shall we find a way to please him?

Do not you think, Charlotte, that it would be a happy thing if God would vouchsafe to publish his will to Mankind, and teach us the Duties he requires us to perform? This, my
I Dear,

Dear, he has done. The BIBLE contains all that is necessary for us to know and practise, and is truly called the *Word of God*, though penned by Men.

The first five books were written by Moses, and I propose to tell you how he came to write them; but shall not relate his whole History, as you will shortly read it in the Scriptures; only I am desirous of convincing you, that Moses was *commanded* by the ALMIGHTY *to write it*.

The People of Israel had for a considerable time been treated in the most oppressive Manner by the Egyptians, as you will read in the BIBLE, where you will also learn how they came to be in Egypt.

GOD ALMIGHTY saw the cruelty that was exercised upon them by command of Pharaoh the King, and as he was a very wicked man, resolved
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to make such an example of him, as should serve for a lesson to all succeeding generations ; and at the same time to perform such wonderful Works, as should convince all who heard them related, that his Almighty Power is able to do whatsoever pleaseth him ; and that as he made all things at first, they are still subject to his will, and he can reward the Good, and punish the Wicked in the most astonishing manner.

Moses was looking after the Sheep of his Father-in-law on the Mountain of Horeb, when suddenly the LORD appeared to him in a Flame of Fire, in the midst of a Bush, and the Bush burned with Fire, and was not consumed. Moses knew that it was the nature of Fire to destroy Wood, therefore he said, “ I will now turn
“ aside, and see this great sight, why
“ the Bush is not burnt.” And when

the LORD saw, that he turned aside to see, he called unto him out of the midst of the bush, and said, "Draw not
 " nigh hither, for the place whereon
 " thou standest is holy Ground;"
 and Moses hid his Face, for he was afraid to look upon God.

The uncommon appearance of a Bush burning with Fire, without being consumed, and the awful voice which he heard, struck him with reverence, so that he dared not continue to look towards the place, fearing he should not be able to bear the sight of so much glory, as seemed to be breaking in upon him.

The great God himself, my dear Charlotte, is of a Nature so infinitely superior to ours, that whilst we are in the Body, we cannot possibly see him, but we may know by his Works,
 (those

(those wonderful Works which I have lately been endeavouring to make you in some measure acquainted with) that he is present every where, and knows all things. But as they are always before our eyes, we are apt to overlook his Hand, therefore when the ALMIGHTY had any particular purpose for shewing his Power or Goodness, it was usual for him to make his PRESENCE *evident* by some extraordinary appearance which should awaken their attention, and prepare them to receive and execute his Commands; sometimes by a bright and sudden Glory in the Heavens, often by altering the course of Nature; sometimes by sending his holy Angels, or good men called Prophets, to make his Will known to Mankind.

When the LORD had by his Glory, manifested himself to Moses, he commanded him to go to the People

ple of Israel, and tell them that he would shortly deliver them from their present Afflictions, and lead them into a Land of Plenty and Happiness; and that he should likewise go to Pharaoh, and request him to let the people go, that they might serve the LORD, for they dared not to serve him publickly in that Land, as their Fathers had done, because the Egyptians would have killed them for it.

And Moses said, "Who am I that I should go unto Pharaoh, and that I should bring the Children of Israel out of Egypt?" for he was a Man who had a very humble opinion of his own abilities. And God said, "Certainly I will be with thee." Moses was still apprehensive, that *his* Word would not be taken on so important a subject, therefore God vouchsafed to give him an immediate proof, that he would grant him the means of convincing

vincing them of his veracity, by performing such wonderful things as none but the *Almighty Power* could effect; for he commanded him to cast down a little Rod which he held in his Hand to the Ground, which immediately became a Serpent; and he was ready to flee from it, when the LORD commanded him to take it by the tail, and it became a Rod again.

Then he commanded him to put his Hand into his Bosom and pluck it out, when he found it covered with a Leprosy, which was a filthy Disease, very difficult to cure; but immediately on his thrusting it into his Bosom and taking it out again it recovered, and was as clear as his other Flesh.

Then the LORD commanded Moses to go and do the same before the Children of Israel, and if they were not sufficiently convinced by these Miracles that he came on God's Errand,

to take some of the Water out of the River, and pour it upon dry Land, and it should immediately become Blood.

But notwithstanding that Moses was sensible of the *immediate Presence of God*, and saw such proofs of his *Power*, he could not get the better of the timidity of his temper, and was still apprehensive that he should not gain credit from the Israelites, because he said he was slow of speech. But the LORD said, "Who maketh
 " the dumb, or deaf, or seeing, or
 " hearing, do not I, the LORD? Now
 " therefore go, and I will be with thy
 " Mouth, and teach thee what thou
 " shalt say;" but Moses continued to entreat the LORD that another Person might be sent; he was therefore permitted to take Aaron his Brother, and the LORD promised to put Words in their Mouths,
 and

and teach them what they should do.

Then he commanded Aaron, who was at a distant place, to go and meet his Brother, who was rejoiced to see him ; so they went together, and assembled the principal Persons amongst the Israelites, when Aaron spake the Words which the LORD had spoken unto Moses, and they wrought the Signs of turning the Rod into a Serpent, and the Hand becoming Leprous, before all the People, who believed ; and when they heard that the LORD had seen their Affliction, they bowed their Heads and worshipped ; and their Hearts overflowed with Thankfulness, Hope, and Joy.

Afterwards Moses and Aaron went and told Pharaoh, that the LORD God

required that the People of Israel might be permitted to go and serve him in the Wilderness; but Pharaoh said, "Who is the LORD, that I should obey his voice to let Israel go? I know not the LORD, neither will I let Israel go;" and he reprov'd Moses and Aaron for hindering the People from their Work, and laid severer tasks on them than before. GOD ALMIGHTY permitted him to do so, that the deliverance he was going to bring about might appear the greater.

The People however were extremely dejected, and began to reproach Moses and Aaron as the authors of these new Calamities; and Moses complain'd to the LORD, that since he had been in to speak unto Pharaoh, he had done more Evil to the People, and that they were not deliver'd at all.

They

They had already seen sufficient to convince them, that God was able to perform his promise, and the History of their Forefathers, Abraham, Isaac, and Jacob, abounded with instances of his loving-kindness towards those who put their trust in him; therefore it was a great Crime in them to Doubt; but it pleased the ALMIGHTY to continue his Favour to them notwithstanding; and he commanded Moses to return again, and desire Pharaoh to let them go, and if he required a Sign, that the LORD had sent them, Moses should take his Rod, and it should become a Serpent; and they did so; but they hearkened not unto them; they therefore departed, and the next day went to him again; when, as the LORD commanded him, Aaron stretched forth his Rod over the Waters of Egypt, and all the River, and every stream of Water became Blood; likewise all

that was in Vessels of Wood or Stone in their Houses, so that the Egyptians could not drink of the Water of the Land; and were greatly distressed.

This did not turn the obdurate Heart of Pharaoh; for when Moses came again to demand leave of the Israelites to depart, he still refused. So Moses and Aaron were ordered to repeat the demand from day to day; and God constantly wrought some great miracle to testify that they were commissioned by him.

But you will read the account of them very shortly yourself in the Bible. I shall therefore only say at present, that Pharaoh was at last so terrified, that he was himself urgent for their departure, but did not believe and repent; for no sooner were they gone than he determined to pursue them,
and

and accordingly gathered his Army together, and followed them.

In order to encourage the Israelites to put their trust in GOD, the ALMIGHTY made his PRESENCE *visible to them* in a remarkable Cloud by Day, and a Pillar of Fire by Night; which in the beginning went before to direct their journey; but when they were in danger of being overtaken by the Enemy, removed and stood behind them, and was a Light by night to the Israelites, but to the Egyptians a Cloud of darkness. Pharaoh and his Host overtook them at the Red Sea, and there they must have been entirely destroyed, but that the LORD continued to perform his Wonders for them. Moses stretched forth his Rod, and GOD caused the Sea to go back by a strong Wind, and made a path of dry Land in the midst of the Waters, through

through which the Israelites passed safely, having the Waters like a Wall on the right-hand and on the left; but as soon as Pharaoh and his Host were got into the midst of the Sea, the LORD said unto Moses, "Stretch forth thy Rod," which he did, and the Waters closed in on the Egyptians, and they were all drowned.

I shall not now relate to you, my Dear Charlotte, what afterwards befel the Israelites. What I have told you was with a view to shew you, before you begin to read the Holy Scriptures, that the Writer of the first part of them was really no common Writer, but was commissioned by God to inform the Israelites of their original, and to communicate a set of Laws which they were to obey in order to please him.

After a great variety of events the LORD commanded Moses to go up to Mount Sinai, and there he told him
to

to write the two Tables of Laws which are still called the Commandments, and make a part of our Duty at this time. You know them by heart, and I shall soon explain them to you.

Moses wrote his Five Books, called Genesis, Exodus, Leviticus, Numbers, Deuteronomy, during the lives of the Persons who had been so miraculously delivered, therefore had they not been strictly true, they could not possibly have gained credit; for how could any Man persuade such a multitude to think that they had been delivered from Bondage, passed through the midst of the Sea, heard the voice of God speaking unto them in Thunder, beheld his Glory which so greatly affected them, that they entreated not to see it a second time, lest they should die: Could, I say, any Man in his senses have been prevailed on to let those

those things pass for Truth if he knew them to be false; and would they have been persuaded to set apart particular Days in the Year in remembrance of what had never happened? Now, it is most certain, that the Israelites did believe the relations of Moses, observe the Laws he gave them, and commemorated the Mercies they had received, and taught their Children to do the same, with their Reasons for doing so. Many of these Laws and Ceremonies are kept by the Jews (who are descendants of the Israelites) to this very Day, and will continue to be so till they all become Christians.

I have much to say to you concerning the Jews, but shall be better understood when you read in the Bible who they were. I hope, Charlotte, you are disposed to believe that Moses was not a deceiver, but really sent
from

from God; we will therefore to-morrow begin to read the HOLY BIBLE, and I hope you will daily increase in the knowledge of God, and ever continue his true and faithful Servant, and then you will be intitled, through his infinite Goodness and Mercy, to a never-ending Life of perfect Joy and Happiness.

F I N I S.

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WITH

ANNOTATIONS

AND

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SUITED TO THE

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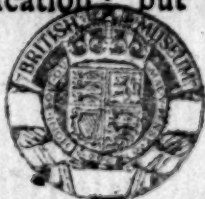
Particularly calculated

To facilitate the STUDY of the HOLY SCRIPTURES in SCHOOLS and FAMILIES, and to render this important Branch of EDUCATION easy to the TEACHER, and pleasing to the PUPIL.

By Mrs. TRIMMER.

*The following Advertisement is extracted from
the Conclusion of the above Work.*

HAVING with the utmost care and attention brought down this work to the time of our SAVIOUR's birth, I must take a short leave of my readers, as the NEW TESTAMENT with Annotations is not yet ready for publication: but I propose to complete



complete it with as much expedition as is consistent with the importance and difficulty of the undertaking.

I cannot close this volume without earnestly entreating those persons who have the care of youth to favour my design with their *particular consideration* before they reject it as too voluminous and expensive; since it is evident, from the impiety and immorality of the age, that the *usual methods* of communicating the first principles of Christianity to young minds are frequently ineffectual. Were the *SCRIPTURES properly explained, and sufficiently enforced in the course of education*, they would infallibly produce the most salutary and beneficial effects, as they contain a system of morality derived from the fountain of divine truth, which would serve as a *standard* whereby to regulate the judgment in other studies, respecting the examples which are worthy of imitation, and the sentiments which may be safely adopted. An early acquaintance with those glorious promises which give hopes of immortal happiness, and with those heavenly precepts which instruct us how to obtain it, would surely be the best security against the dangerous

gerous allurements of a vicious and dissipated world: Thus instructed, our Youth would no longer fall an easy prey to the Infidel and the Scoffer, nor dare with profane lips to deride the sacred Word of God.

This work was compiled with a view to facilitate the acquisition of Christian Knowledge in Schools and Families, without engrossing the time necessary to be employed in the attainment of classical and other polite accomplishments, or without interrupting the performance of domestic duties. The custom which too generally prevails, to the misfortune of the rising generation, of discontinuing the *daily* use of the BIBLE, will, I fear, operate against me; but those who *revere* the SCRIPTURES, will perhaps be induced to honour my performance with a place at least in their School Libraries, and receive it as an humble assistant to their Sunday evening's instruction.

Some persons entertain an idea, that every religious work, intended for the use of young readers, should be *short* and *concise*; but if I may, without being thought arrogant, presume on the experience of many years, I will venture to say, that at an early age, children

dren may be invited to *dwell* with pleasure on every part of *Sacred History*; nor do I believe it is possible to give them that love for divine subjects, which is necessary in order to make their duty their delight, without a *particular* explanation of the great chain of events, from the Creation to the Redemption of mankind, *as related in the BIBLE*. To a neglect of this may reasonably be imputed the deplorable ignorance of numbers in spiritual concerns, who, in respect to human affairs, are well instructed.

I have already offered my reasons for giving the history in the very words of the inspired writers, and hope it will be found, from this circumstance, preferable to the usual substitutes, denominated *Histories of the Bible*, &c. For even admitting that compilations of this nature may be executed with the utmost elegance of human art, yet the very best must fall infinitely short of their divine original, degrade the sublime subject, which no language but that of holy inspiration can suit; and, by satisfying curiosity, rather tend to draw the mind from the Scriptures than to conduct it to them.

In selecting from the contents of the sacred volume, I have attempted to display
the

the infinite perfection of the divine attributes, as well as the peculiar beauty of the historical parts of the Holy Scriptures, and their connection with the prophetic writings, so necessary to be known, in order to the right understanding of the doctrines of Christianity; which I trust will render it useful to such persons also as have not time to study larger works, or are destitute of the means of procuring them.

In the Annotations I have studiously endeavoured to avoid whatever might tend to puzzle the mind, or raise doubts and objections. In the Supplemental part I have carefully restrained myself from expatiating too largely on the history of those nations which were connected with the Jews, thinking it best to keep the attention fixed to the principal object.

Accustomed to meet with indulgence from the candid public, I promise myself a continuance of it; and shall exert my best endeavours to execute the subsequent part of this work in such a manner as to convey a comprehensive knowledge of the doctrines of Christianity, and the character and example of our blessed SAVIOUR.

Brentford,
April 15, 1783.

